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of the

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WASHINGTON, D. C.
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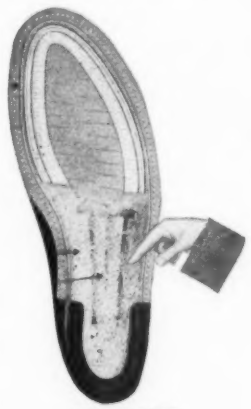

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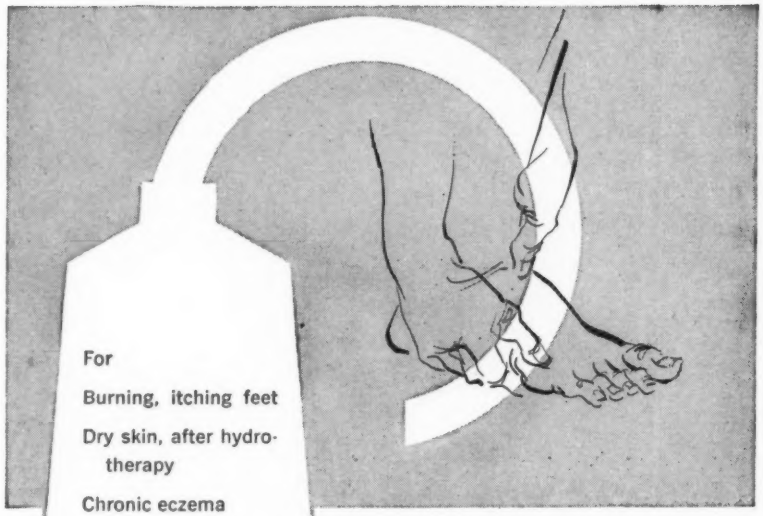

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[1]Ignatoff, W. R., Journal National Assn. Chiropodists, December 1952

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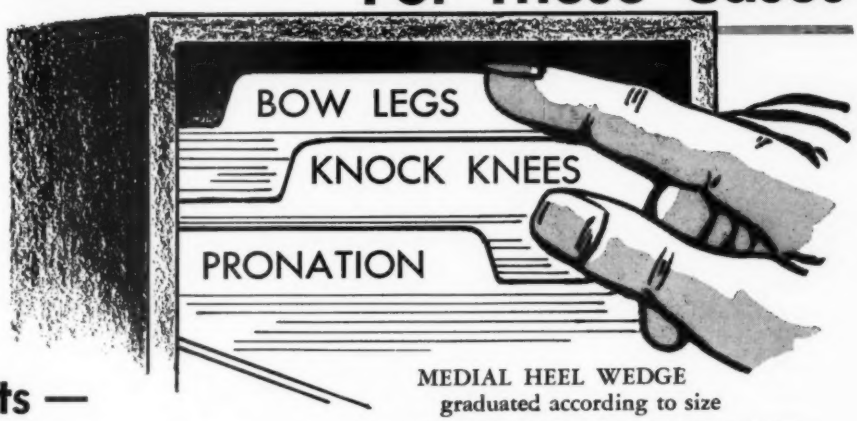

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California
The Board of Medical Examiners of the state of California. **Executive Secretary:** Louis E. Jones.

Connecticut
The Connecticut Board of Examiners in Chiropody. **Board Secretary:** Dr. F. J. Ruggiero, 3 South Main Street, W. Hartford 7, Conn.

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The next board meeting of the New Hampshire Board of Registration in Chiropody will be held for examination the second week in December, 1957 at 61 S. Spring St., Concord, N. H. **Board Secretary:** M. Atkinson, M.D., 61 S. Spring St., Concord, N. H.

New Mexico
The next board meeting of the New Mexico State Board of Chiropody will be held for reciprocity and examination on July 12-13, 1958 at Albuquerque, N. Mex. **Board Secretary:** Morris Haas, D.S.C., 1301 Centra. Ave., East, Albuquerque, N. M.

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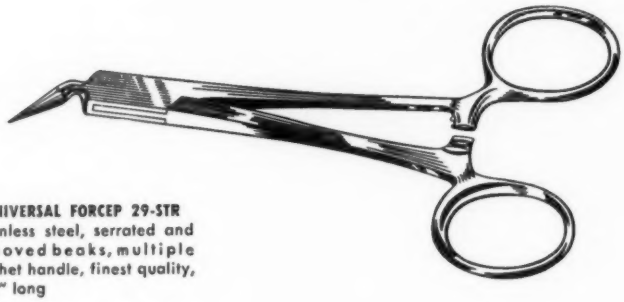
The New York State Board of Podiatry Examiners. **Board Secretary:** Mr. James O. Hoyle, 23 S. Pearl St., Albany, New York.



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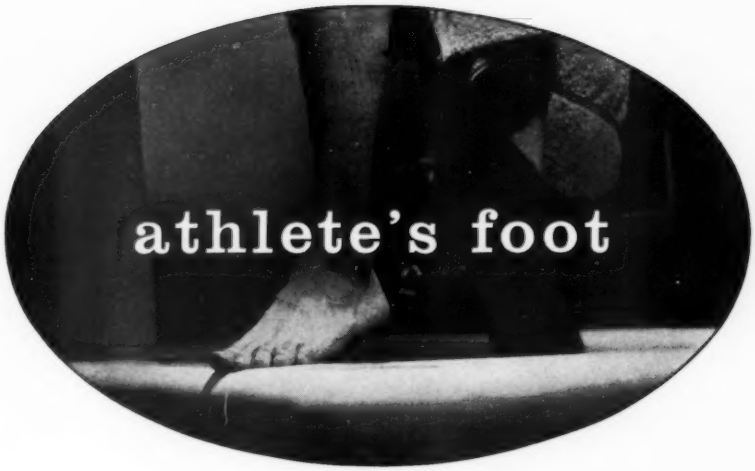

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VOLUME 47 DECEMBER, 1957 NUMBER 12

FREIBERG'S INFRACTION AS AN INITIATING FACTOR OF SECONDARY ARTHRITIS IN THE FOOT*

JOSEPH R. CINZIO, D.S.C., F.A.C.F.O.
Passaic, N. J.

This paper will attempt to reveal a relationship between Freiberg's infraction and arthritis involving the metatarsophalangeal joints of the foot.

Freiberg of Cincinnati reported the existence of a pathological condition primarily affecting the second metatarsal head, and less often the third. In his treatise, he described the conditions as a "crushed in", or flattened appearance of the second metatarsal head, on radiographic interpretation. Freiberg considered trauma as the initiating cause and he based this belief on the fact that a number of his cases were devotees of tennis. These patients were able to trace the onset of painful symptoms to a time closely following a recent contest.

As a rule, the second metatarsal bone in the "average" foot extends forward beyond the first and third, thus making its head more vulnerable to injury than any of the others, when weight-bearing is assumed[1]. Thus Freiberg's theory of traumatic origin is well founded and merits consideration.

A short time after Freiberg reported his findings, Alban Köehler of Wiesbaden, Germany, announced a similar observation, but he did not attribute the pathological process to trauma. Köehler believed the etiology to be an "unknown pathological factor."

Lewin[2] of Chicago, in July, 1923, suggested the term "Juvenile Deforming Metatarsophalangeal Osteochondritis," as a more descriptive term for the condition. He stated that the etiology of the ailment was unknown, but that in all probability it was related to that of Köehler's disease of the tarsal navicular, calcaneal apophysitis and other bone disorders peculiar to the adolescent stage of growth (osteochondridities). The basis of the pathology is attributed to vascular changes resulting in an aseptic necrosis of the second metatarsal head.

Lewis[3] reveals that "in many instances a short first metatarsal has been noted. Consequently much of its share as a weight-bearing entity and a lever in the act of propulsion is placed on the second metatarsal head." Hypertrophy of the cortex of the second metatarsal shaft is usually a co-feature of this condition.

Pathology: On roentgen examination the findings are: (Fig. 1)

1) Flattening of the metatarsal head;

2) Broadening of the neck and distal portion of the shaft;

3) Irregularity of the epiphyseal line;

*An award winning paper in the 1957 William J. Stickel Annual Awards for Research in Chiropody. Presented at N.A.C. annual meeting, Chicago, August 1957.

4) Widening of the metatarsophalangeal joint space;

5) Diminished cupping of the articular surface of the proximal phalanx;

6) Occasionally, a line of incomplete fracture without displacement.

Lewin, Valentin, Axhausen and Lick report the presence of areas of sequestration in some cases. Fragmentation of the involved metatarsal head is clearly visible in chronic, untreated cases. A differential diagnosis should be made between Morton's neuralgia, metatarsalgia, periostitis, fracture, dislocation, synovitis, syphilis, and rheumatic fever.

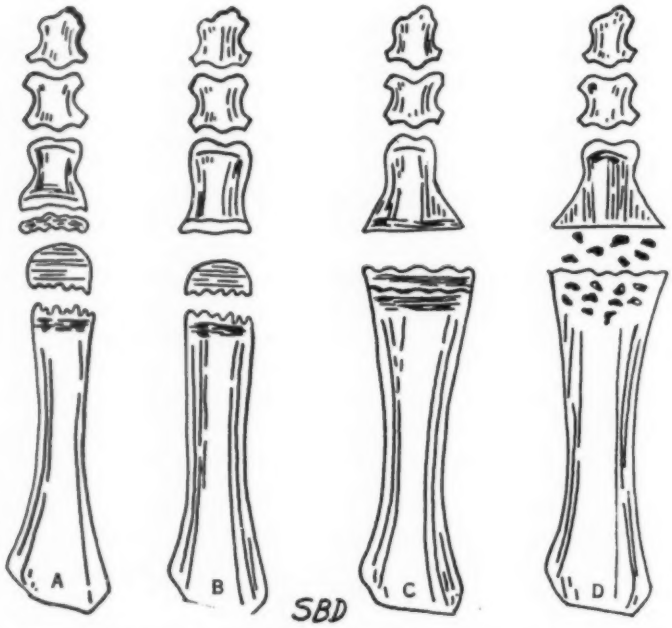

Fig. 1—Schematic Drawing of Freiberg's Infraction. (A) Normal; (B) Incipient Flattening of Metatarsal Head; (C) Definite Flattening of Base of Proximal Phalanx and Head of Metatarsal; (D) Chronic Osteochondritis with Evidence of Fragmentation. (After M. R. Lewis—Roentgen Foot Diagnosis.)

Physical Findings

The gait of the patient is altered and the individual may limp. Limitation of movement, pain on flexion of the joint, edema, and a "simulated" point tenderness may co-exist. Pain may also be elicited on palpitation of the intermetatarsal spaces on either side of the joint (possible dorsal interossei spasm).

In order to better illustrate the perpetuation of secondary arthritis, let us briefly examine the anatomy of the condyloid articulation, (articulatio ellipsoidea) as seen in the metatarsophalangeal joints in the foot. In the freely movable joints, the apposing surfaces are completely separated; the bones forming the articulation are expanded for greater convenience of mutual connection, covered by hyaline cartilage and enveloped by capsules of fibrous tissue. The cells lining the interior of the fibrous capsule form an imperfect lining – the synovial membrane– which secretes a lubricating fluid. This membrane invests the fibrous capsule forming a closed sac termed the synovial cavity. The synovial cavity of a normal joint contains only enough synovial fluid to moisten and lubricate the synovial surfaces, but in an injured or inflamed joint the fluid may accumulate in painful amounts. (Fig. 2)

Owing to trauma, disease or infectious processes, the cartilage, having no independent blood supply (nutrition is obtained via perichondral fluids), undergoes deterioration and wears thin at contact

points. Following this degeneration, the joint space is altered and the articular ends of the bones become subjected to almost constant trauma. In this light, gross or frequent micro-trauma is equally responsible for joint pathology. (Examples: Stubbing of the toes while walking barefoot; frequent stopping to lift objects; short shoes and hose, etc.)

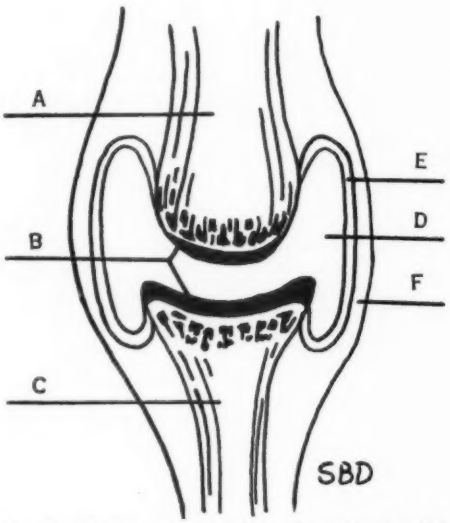

Fig. 2—Diagrammatic Section of a Diarthrodial Joint. (A) Metatarsal Bone; (B) Articular Cartilage; (C) Proximal Phalanx; (D) Synovial Cavity; (E) Synovial Stratum; (F) Fibrous Stratum. (After—Gray's Anatomy.)

Ossification

The metatarsal bones are each ossified from two centers; one for the body, and one for the head of the second, third, fourth, and fifth metatarsals; one for the body and one for the base of the first metatarsal. Ossification commences in the center of the body about the ninth week, and extends toward either extremity. The center for the base of the first metatarsal appears about the third year; the centers for the heads of the other metatarsals between the fifth and eighth years[4].

During the growth phase the epiphysis remains for some time entirely cartilaginous, until a bony center appears. The epiphysis remains separated from the body of the metatarsal by a narrow cartilaginous layer for a definite time. This layer ultimately ossifies, the distinction between the body and epiphysis is obliterated, and the bone assumes its completed form. The heads of the metatarsals join their respective bodies between the eighteenth and twentieth years.

(Thus, one can visualize Lewin's concept of "vascular changes resulting in an aseptic necrosis of the metatarsal head," as having a sound basis. Adolescents, as a rule, are extremely active and owing to the span of time prior to complete ossification, trauma could readily disrupt the vascular supply to the developing bone.)

The times of union of the epiphysis with the body vary inversely with the dates at which their ossification began (excluding the fibula) and regulate the direction of the nutrient arteries of bones.

Lewis[3] lists a definite sequence of events in joint pathology, as follows:

1) Erosion of articular cortex;
2) Death of articular cartilage;
3) Bones without cartilage touch each other;
4) Adhesions in joint are formed by joining of granulation;
5) Calcium salts are laid down into the granulations (which originate in bone marrow).
6) Ankylosis;
7) Spur formation from connective tissue hyperplasia outward to the periosteum.

When undue loads of body weight are thrust onto joints not constructed to carry such loads, or at various angles as to deliver the impact by direct or referred pressure beyond the limits of the articulating facets, the cartilage undergoes undue stress and the bone becomes sclerosed. In Freiberg's infraction we can visualize these facts by examining the involved joint radiographically. Since the head of the meta-

TABLE I—ROENTGEN FINDINGS

Patient	Sex	Age	Involved Meta. Head	Radiographic Interpretation
F. S.	M	36	2nd meta. head of right foot	Morton's syndrome; irregular, flattened appearance of 2nd meta. head of right foot; bi-partite sesamoids; 2nd meta. joint space narrowed: thickened cortex of 2nd shaft.
B. M.	F	44	2nd meta. head of left foot	Pes cavus foot; Freiberg's infraction of 2nd meta. heads of both feet: thickened 2nd shafts.
R. D.	F	35	2nd meta. head of right foot	Morton's syndrome; flattened; irregular appearance of 2nd meta. head, right foot.
E. E.	F	54	2nd meta. head of left foot	Osteoporosis, pronation bilateral; Freiberg's infraction of 2nd meta. heads, bilateral.
A. B.	F	23	3rd meta. head of left foot	Morton's syndrome; os intermetatarseum. Freiberg's infraction of 3rd meta. head, left foot.
E. P.	F	30	2nd meta. head of right foot	Pre-exostosis, of inferior surface of right calcaneus; incipient flattening of 2nd meta. head of right foot.
N. F.	F	14	3rd meta. head of left foot	Morton's syndrome: bi-partite sesamoids; advanced flattening of 3rd meta. head, left foot.

tarsal is deranged, it no longer serves as an active component of the articulation. Continued stress via trauma direct or indirect, causes definite alterations in the joint proper—a traumatic arthritis. If a weak-foot or hallux valgus condition simultaneously exists, a further imbalance results, exerting more stress on the abused articulation.

Lewin[2] states that when infraction of a metatarsal head is found in an adult it was present, but unrecognized in earlier life. Of the seven cases in this study, four patients illustrate this fact. These patients all gave a history of some previous injury in their youth. None of the patients were radiographed at the time of injury. This left the author without a comparative method for his radiographs. One can only assume with a fair degree of accuracy that the condition originated earlier in life.

The author feels that Freiberg's infraction does not involve the articulation per se, but also includes the articular capsule. It is possible that the synovial cavity is disrupted to some extent. Adhesions form in the joint and ankylosis may ensue. In two of the case studies, the second metatarsophalangeal articulation (s) of the right foot were somewhat rigid, especially when flexion of the joint was attempted. Crepitus could be elicited in both cases. Cadaver studies would reveal the gross pathology. It would be well to include Freiberg's infraction as a component of the traumatic arthridities.

Roentgenology

The patients comprising this study were radiographed, on weightbearing, in both dorso-plantar and oblique views. Freiberg's infraction, involving either the second or third metatarsal heads, was interpreted in all of the cases. Only one of the patients was a male; the remainder were females ranging from fourteen to fifty-four years of age. (Refer to Table I, Roentgen findings.)

Therapy

If the condition is seen at an early date and effective measures are instituted to arrest the disorder, extensive joint involvement may be prevented. In neglected cases, extensive joint deformity and disability eventually occurs. Chronic cases, with evidence of fragmentation may require surgi-

TABLE II—ILLUSTRATING PHYSICAL FINDINGS AND RESPONSE TO TREATMENT

Patient Sex, Age Onset	Metatarsal Head Involvement	History of Trauma	Physical Findings	Footwear	Treatment Instituted*	Response
F.S. M 36 yrs. Gradual	2nd meta. head, right foot	Stepped on a nail at 10 yrs. of age	Pes cavus type foot; Tyloma 1st & 5th, bilateral	Improper last; short fit	Proper last & fit: Inj. of 0.4cc. into 2nd meta. joint, rt. foot	2†; repeated twice (10-day interval); 3† after 3rd injection
B.M. F 44 yrs. Gradual	2nd meta. head, right foot	None	Pes cavus type foot	Short & narrow fit	Proper last, molds, & Inj. of 0.5cc. into 2nd meta. joint, rt. foot	3†; repeated twice, at 7-day intervals
R.D. F 35 yrs. Gradual	2nd meta. head, right foot	Recalls child-hood injury	Hyper-mobile first segments	Short, narrow fit	Properly fitted shoes, balanced inlays; inj. 0.4cc. into 2nd meta. joint, rt. foot	3†; only one Inj. given; supportive inj. to be given when needed
E.E. F 54 yrs. Abrupt	2nd meta. head, left foot	None	Pronation; Tylomata 2nd meta. heads, bilateral	Improper last	Proper last, molds, & Inj .of 0.5cc. into 2nd meta. joint, left foot	3†; felt very comfortable for 1 month; supportive inj. given as needed
A.B. F 23 yrs. Gradual	3rd meta. head of left foot	Recalled injury at college dance (Stubbed 3rd toe)	Hyper-mobile first segments	Pump worn daily	Proper oxford, molds, & Inj. of 0.5cc. into 3rd meta. joint, left foot	3†; comfortable for nearly 4 mos., aggravated by dancing
E.P. F 30 yrs. Gradual	2nd meta. head of right foot	Recalled injury at work	Peri-arthritis of rt. heel H.D. 5th digits	Ballerina type slipper or loafer	Proper oxford, molds; Inj. of 0.5cc. into 2nd meta. joint, rt. foot	3†; comfortable for 3 mos., aggravated when pump is worn
N.F. F 14 yrs. Abrupt	3rd meta. head of left foot	Stubbed 3rd & 4th toes at school dance	Hyper-mobile first segments	Narrow & short fit	Proper oxford, Inj. of 0.5cc. into 3rd meta. joint, left foot; strapping & paddings	2†; relieved for 2 wks.; pain returned after basketball game; 3† (2nd inj.) Asymptomatic

This series has only one male patient (first) and only one adolescent (last).

* Meticortelone Acetate Aqueous Suspension (25mg/cc.), Schering Corp., Bloomfield, N. J., used in each case.

1† (slight relief of pain)

2† (moderate relief of pain)

3† (complete remission of pain)

cal intervention to remove calcerous bodies.

Complete rest is the most curative measure. For this reason, Schuster[1], Lewin[2] and Dickson and Diveley[5] advocate immobilization of the entire foot and lower leg in a plaster cast. If not feasible, other methods must be utilized to limit motion in the afflicted joint on walking and standing. A metatarsal plate, felt padding, use of a Thomas bar, balanced inlays, and physiotherapy are all efficacious. Brachman[6] suggests either a metal plantar plate or Roberts plate to immobilize the foot. A well-fitted shoe will enhance all forms of therapy.

Meti-Steroid Therapy

As an additional measure, the author utilized joint paracentesis with Meticortelone Acetate Aqueous Suspension®[1]. The average dosage for injection is 10 to 15mg. (0.4 to 0.6cc.) preceded by local infiltration with 1-1½%cc. 2% Xylocaine®[2] (1:100,000 epinephrine). The interval between injections is determined by individual response. No untoward symptoms were encountered and post-injection pain was minimal or completely absent. Complete remission of pain was experienced in most of the cases. Meticortelone Aqueous suspension provided prolonged relief of pain in minute doses. The localized action of intra-articular solutions as Meticortelone practically eliminates deleterious side effects normally associated with non-specific hormonal therapy.

It should be noted that corticosteroid therapy is not a panacea, but these medications are a definite addition to chiropodal therapeutics. For a concise evaluation of the use and action of corticosteroids the reader is referred to excellent articles by Rubin[7] and Locke[8].

®[1] Schering Corporation
®[2] Astra Pharmaceutical Products Inc.

Summary

The relationship of Freiberg's infraction and arthritis of the metatarsophalangeal joints has been explored.

Seven cases have been evaluated and the utilization of corticosteroid therapy has been mentioned.[9]

Conclusive evidence of this pathological condition should be sought in cadaver studies.

Conclusion

Early detection and treatment of Freiberg's infraction is the key to the prevention of joint pathology in the adult.

220 Lexington Ave.

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"A man never reveals his own character more vividly than when portraying the character of another."

—Jean Paul Richter
(1763-1825)

NUTRITION IN CHIROPODY

A Preliminary Report on Local and Systemic Administration of Vitamins in Deficiency States Affecting the Lower Extremities*

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Any great, dynamic profession requires food for survival and growth. If nutrition is diverted in any way, the body will dehydrate like an amoeba cast on desert sands. So it is with the profession of chiropody. It has withstood the so-called elements of "hard-knocks" in the early past, evidenced by all beginning professions of worth. But, chiropody cannot stand still on past efforts. We must develop food for thought. Therefore, it is the purpose of this paper to offer a modern approach, a modern facet to the advancing ideas of therapy in chiropody; a facet only, not a complete or separate answer to the many problems that confront us in practice.

Whether the concept of Andrew Still,[49] the founder of Osteopathic Medicine, that "the artery is supreme" is in full accord with accepted truth, we will not venture to say. The concept, however, is at least worth considering, even as a generalization. Let us go a bit further in expanding on Andrew Still's concept. Let us view the end result—the cell and its relationship to nutrition. So it is that a carrier's function is as good as its channel. We will only consider nutrition under normal physiological conditions, omitting pathological nutritional states.[33,54]

In recent months, many investigations in the field of nutrition have been going on in all parts of the world.[40,51,31] Many investigators have been synthesizing hormones, enzymes and vitamins and investigating their synergetic relationship with each other; this is an attempt to explain life processes. Although much has been accomplished in these investigations much more research needs be done to increase our knowledge. This paper is intended to excite us to the possibilities of vitamins in our armamentoria of practice. Certainly if nutrition is assimilated in one part of the body it follows that it is assimilated in others. The feet are not excepted from this rule.[6, 58]

Since the life processes of the organism are dependent on anabolism and catabolism we are presenting vitamins as a phase in the over-all picture of nutrition as it involves our field. The interchange of materials among cells goes on day and night as within these exchanges vitamins seem to react like spark plugs in a combustion chamber giving impetus to the rapid oxidation of materials for the production of energy. It is our purpose therefore to tie the theoretical explanations of vitamins into a practical "knot" engaging all the means at our command to present practical evidence of this vitamin relationship as it pertains to chiropody.

Review of Factors

What are vitamins? Presently, they are not totally understood or defined. We do know that they are necessary for our being and that they are catalyzers of our basic life processes.[1,2] In general, we can say that they are organic regulators of metabolism required in the daily diet of animals and men for normal growth and maintenance of life.[37,16] Because of the several nomenclatures given to vitamins and their counterparts we shall align ourselves with an

*U. S. Vitamin Corporation supplied the vitamin products used in this study.

accepted outline of them as described by most authorities in the field of nutrition. We shall proceed alphabetically:[5,34,36,23,48]

Vitamin A Group:

Eye antixerophthalmic factor.

Skin—antixerotic and antikeratinic factor.[41, 47]

Vitamin B Group:

Vitamin B: Anti beri-beri factor.

Vitamin B Complex: one of the hematinic factors.

B1: called thiamine—anti beri-beri factor antineuritic and antineuropathic.[45,46,22]

B2: essential factor in cellular oxidation and reduction—Riboflavin.

B3: chick pellagra factor believed to effect tendinitis in deficiencies.

B4: prevents muscular weakness in rats—probably mixture of riboflavin and pyridoxine.

B5: necessary for growth of pigeons, probably a fraction of nicotinic acid.

B6: called pyridoxine. Deficiency causes dermatitis in rats, neuropathy in man.[53,35]

B7: rice polish factor.

B8: Adenylic Acid – anti-inflammatory factor; muscle tone in vascular activity affected.[39]

B9: not classified.

B10: chick feathering factor.

B11: probably related to B12 and folic acid because of hematinic responses.

B12: also called cyanobalamin: aid in megoblastic anemia and neuropathy.[18, 43, 3]

B13: discovered in distillers' dry solubles.

B14: related to folic acid.

B15: pangamic acid.

Nicotinamide: prevents pellagra, also called niacinamide.[35]

Pantothenic Acid: antineuropathic factor; burning foot syndrome in man responds to this factor.[18,19,4,53]

Biotin: anti egg-white injury factor.

Choline: required for transmethylation.

Inositol: same as Biotin.

Amino-benzoic acid: anti gray hair factor in rats; promotes growth.

Folic acid: required for growth and blood formation.

Vitamin C: also ascorbic acid; also c-vitamic acid. Antiscorbutic factor.

Vitamin D: viosterol, also called calciferol—antirachitic factor. This can be a toxic vitamin.

Vitamin E Group:

The tocopherols—prevents sterility, also antirheumatic. This factor also aids in treatment of neuropathy.

Vitamin K: Blood clotting factor; prevents hemorrhage.

Vitamin P: capillary fragility factor; permeability factor.

Rutin: same as vitamin P.

Vitamin R: promotes bacterial growth, probably one of the folic acid group.

Vitamin S: promotes bacterial growth, and chick growth.

Vitamin T: involved in protein assimilation in rats.

Vitamin U: probably belongs to the folic acid group.

Vitamin V: a nicotinamide enzyme.

Vitamin W: same as Vitamin X.

Vitamin X: probably like Biotin.

Vitamin Y: probably identical to pyridoxine.

The above-mentioned vitamins include all the known vitamins up to the present. Therapeutic doses of most (in man) are not known at the present time. It is the purpose of this paper to advise the profession of the possibilities of vitamins in our armamentaria. The practical uses of therapeutic vitamins which were used in our clinical study are submitted for study and evaluation.

Other aspects of nutrition will not be considered for evaluation at this time but we should be aware of their significance. It is our intent to illustrate only the use of certain specific vitamins used in support of regular nutritional elements. It must be

accepted that in a good diet there is a minimum daily requirement of vitamins and minerals. Only then can we consider specific deficiency states. These will be outlined under dosage and administration.

Clinical Evaluation

In a carefully organized clinical set-up with complete supervision by A. P. Cambadhis, M.D., of Manchester, New Hampshire, medical advisor to the Manchester Chiropody Society, each individual diagnosis was confirmed and the treatment and proper vitamin administration carefully outlined in group consultations. Periodic checks were made and all problems called to his attention as soon as possible. All laboratory tests were screened in like manner and reports given to him to evaluate.

200 cases were selected, all of whom had been treated previously for periods of more than two years with poor or negligible results with the exception of symptomatic relief. These patients were selected because of persistent pathology and poor result of treatment, following regular, periodic therapy by accepted adjunctive methods. These patients were continued under careful control with the addition of local vitamin application. In Table I, you will note that the percentage of good to excellent results was a mean average of 26.5%. It was not possible to follow 2.5%. A definite improvement was noted in another 39%. In recapitulation, it is notable that approximately 10% of the total cases show excellent results which entailed complete obliteration of the localized symptoms which had heretofore resisted all attempts. Also important is the 17% that were of good result (relief from pain and partial reduction of the lesions present). The significance of the 39½% figure for fair results and the 32% with poor results indicates that there is need for further study. Also note the 2½% recurrence.

All of these cases with any remaining symptoms were again selected for further therapy. Again, the routine of complete adjunctive therapy was resumed and a regimen of careful oral nutritional supplementation was implemented. Table II shows any additional improvement recorded after oral and parenteral vitamin therapy was added to regular chiropodical and local vitamin therapeutics. Table II also shows that a remaining 183 cases were treated, as only those with complete remission of symptoms were dropped from the chart as arrested cases.

We would like to point out that many cases with favorable prognosis were not used in this report, as they were referred to their physicians for further treatment after local therapy was adjudged as insufficient.

In Table II, note the definite improvement as evidenced by 78% completely symptom free. The story is now quite different with only 7% failing to respond and another 2½% showing a recurrence of symptoms. It was impossible to follow 3½% to completion. It is interesting that all reported complete relief from pain within 48 hours of institution of therapy with Vitamin A for verucca.

Discussion

As Spies states,[48] to rely entirely on dietary therapy is inadvisable and impractical. This is but another adjunctive facet of over-all therapy, just as physiotherapy or surgery.

We must also be well aware of the synergism of vitamins in relation to each other and the complete biological picture, as outlined by Joliffe,[26] and Barr.[1] Unless we have a basic balance of vitamins with minerals and other enzymatic forces, our attempt at supplementation will lack effectiveness. The method is as important as the means, as indicated by Pollack and Halpern.[40]

Administration and Dosage

In view of the work done by Spies,[48] Kruse et al.,[27,43] there is very little evi-

TABLE I. — LOCAL APPLICATION OF VITAMINS

Diagnosis	No. of Cases	Length of Treatment	Type of Vitamin Therapy Used.	Results* P	F	G	E	U	R
Plantar Keratosis	38	12 wks.	Aquasol A.	2	19	13	3	1	2
" Neurofibrous Keratosis	29	8 "	" A.	4	21	3	1		1
" Verruca (arid)	34	8 "	" A. & C.	11	8	4	9	2	1
Mosaic "	13	10 "	" A. & C.	10	2		1		
Heloma Durum	26	12 "	" A. & C.	14	11		1		
Interdig. Heloma	3	14 "	" A.	1		1	1		
Dermatitis Venenata	9	6 "	" A.	15	1	1	2		1
Neural Dermatitis	4	8 "	" A.	3	1				
Peripheral Neuritis	2	4 "	Vitamin E.	2					
Lichen Planus	1	3 "	Aquasol A.		1				
Seborrheic Dermatitis	5	7 "	" A.	4	1				
Senile Keratosis	5	9 "	" A.		4	1			
Acute Cellulitis	3	2 "	Vitamin, A, D, C		2	1			
Dermatophytosis	6	8 "	Aquasol A.	3		3			
Acute Hyperhidrosis	2	3 "	" A.		1	1			
Anhydrosis	5	2 "	" A.		1	3	1		
Varicose Ulcer	2	13 "	" A. & D.	1	1				
Acute Myofibrositis	2	3 "	Vitamin E.	1		1			
Acute Tendinitis	1	5 "	Vitamin E, C, A.		1				
Nucleated Tyloma	2	15 "	Aquasol A. & C.	1	1				
Trophic Ulcer	7	8 "	" A.	5	1	1			
Keloid	1	7 "	" A.		1				
Totals	200	7½ wks (average)		66	78	34	19	3	5

* P—poor: F—fair: G—good: E—excellent: U—unknown: R—recurrence.

dence of toxicity in vitamin administration. Even in very large doses for long periods of time, only Vitamin D is to be considered toxic. There are cases of Vitamin A poisoning, but only in excessively large doses which would be unlikely in clinical therapy. We have only found four cases of Vitamin A toxicity reported in literature, and negligible evidence of the other vitamins with exception of the aforementioned D vitamin.[20] As stated by Warkany who made a lengthy study, Vitamin D should be treated as carefully as any drug, rather than as a food. Therefore, as stated by Goodhart[18] and Moore,[35] it is advisable to use large dosage of vitamins to obtain maximum results. Kruse states that this must be five to ten times the minimum daily requirements for that specific vitamin, presupposing a sufficient daily food intake and balanced nutritional state.

Local application of vitamins were carried out in our study by the use of Aquasol A®[1] cream, a greaseless cream containing 200,000 USP units of synthetic, water soluble vitamin A to the ounce and Panthoderm®[1] which is a 2% cream of

®[1] U. S. Vitamin.

pantothenylol (the alcohol analog of pantothenic acid). Administration was by unction and by contact, renewed each day or twice a day, as indicated by resistance. This was used for dermatological conditions, ulcerations, heloma molle, senile keratosis, anhydrosis, keloid, etc. (see Table I.[37,11,21,9])

Vitamin C was added to this formula in a concentration of 1350 milligrams to the ounce of Aquasol A cream, using a product called "Natrascorb"® as a source

TABLE II. — GENERAL AND SPECIFIC NUTRITIONAL SUPPLEMENTATION

Diagnosis	No. of Cases	Length of Treatment	Type of Vitamin Therapy Used†	Results* P	F	G	E	U	R
Plantar Keratosis	36	20 wks.	A–150,000u/day.	2	4	2	28		1
" Neurofibrous Keratosis	29	16 "	A–100,000u/day.	1		2	25	1	
" Verruca (arid)	24	7 "	A–100,000u/day.				23	1	
Mosaic "	12	9 "	A–150,000u/day.	1			11		1
Heloma Durum	25	16 "	A–100,000u/day. Multivitamins	7	1	5	9	3	1
Interdig. Heloma	2	8 "	A–100,000u/day. Multivitamins				2		
Dermatitis Venenata	8	12 "	A–100,000u/day. B12–25mcg./day.			1	7		
Neural Dermatitis	4	8 "	A–100,000u/day. B12–25mcg./day.	1			3		1
Peripheral Neuritis	2	4 "	B1–25mg./daily B12–10mcg./day.			1	1		
Lichen Planus	1	8 "	A–100,000/day. C–150mg./day.			1			
Seborrheic Dermatitis	5	12 "	A–100,000u/day.	1		1	3		1
Senile Keratosis	5	8 "	Therapeutic Vit.				5		
Acute Cellulitis	3	3 "	C–150mg/day; mult.			1	2		
Dermatophytosis	6	3 "	A–150,000u/day.				5	1	
Acute Hyperidrosis	2	4 "	A–100,000u/day. Multivitamins				2		
Anhydrosis	4	4 "	A–100,000u/day.				4		
Varicose Ulcer	2	6 "	Thera. formula & Vitamin C. & A.				2		
Acute Myofibrositis	2	3 "	Thera. form. & E.			1	1		
Acute Tendinitis	1	2 "	Thera. form. & E.				1		
Nucleated Tyloma	2	13 "	A–100,000u/day.				2		
Trophic Ulcer	7	8 "	A–100,000u/day.			1	5	1	
Keloid	1	10 "	A–100,000u/day.				1		
Totals	183	8 wks. (average)		12	6	16	142	7	5

*P–poor: F–fair: G–good: E–excellent: U–unknown: R–recurrence
†All by oral administration.

of the C vitamin.[2] This was applied as a contact application either once or twice each day, as indicated and covered by a sterile dressing. This was used in neurofibroma, verucca, heloma durum, nucleated tyloma, etc.

An ointment containing Vitamin E was used in peripheral neuritis, myofibrositis and tendinitis.

Oral administration was by indication and consisted of Vitamin A, C, B12, multivitamins and therapeutic vitamins and Vitamin E, as outlined in Table II and according to recommendations outlined by Joliffe and Smith.[27] We are not reporting on the use of B8 at this time, as our work with this substance was covered in a report published in The Journal of the National Association of Chiropodists of June 1956.[39]

Case Studies

The following are some case experiences with a few cases not included in the tables, but providing a cross-section of conditions and treatment.

Case 1: C. W., a 16-year-old white male, complained of severe pain on plantar surface of the right foot, complicated by excessive sweating and burning of both feet. This case had been treated as plantar callous several times by two different practitioners. A diagnosis was made of mosaic veruccae complicated by hyperhidrosis and fungi (trycophyton gypseum identified by Saboraud's culture). Treatment was instituted with Burrow's solution soaks, an astringent dusting powder, and ultra violet radiation for the fungus symptoms and chemical cautery (60% salacylic acid plasters) to the verrucous area.

The condition was treated once each week for eight consecutive weeks with gradual improvement of the fungus symptoms, while the verrucae multiplied and enlarged. Local vitamin therapy was prescribed and at the end of four weeks, treatment showed markedly good results and in one more week, all indication of pathology had vanished. Patient was examined six months later with no apparent recurrence. Result: Complete abatement of mosaic verrucae.

Case 2: H. H., a 47-year-old white female, complaining of pain in the right foot, was referred by her physician and an orthopedic surgeon. A diagnosis of plantar verrucae, humida (multiple) was made. Treatment was instituted with vitamin therapy by local application after patient related all the varieties of treatment for over eighteen years. The condition had been diagnosed previously as seed corns or heloma milliare. The cream was applied twice a day and covered with a plastic band-aid. The condition was completely cleared in nine weeks and at last examination, six months later, there was no recurrence.

Case 3: D. A., a 49-year-old white female, appeared for treatment, complaining of pain in the left foot, both plantarly and dorsally with a callous evident on plantar examination, but no objective signs dorsally. A diagnosis was made of neurofibrous keratosis, left hallux base, plantarly and idiopathic neuritis dorsally, both of the left foot. Patient related of long periods of recurrent pain and treatment for several years, following a severe illness of vague description. Vitamin cream (A, C, and pantothenic acid) was applied to the plantar lesion with instructions for routine care. Hydrotherapy and diathermy were administered twice a week and one sixteenth inch balance pad placed in all shoes to correct a forefoot imbalance. The keratosis was absent seven weeks later. Small improvement and continued intermittent loss of sleep, due to the neuritis, indicated need for further review of therapy.

After consultation, with two orthopedic surgeons, and our clinical group, it was decided to use oral vitamin therapy. 25 milligrams of thiamin hydrochloride

was administered per day following injection (infiltration) into the area with 2 c.c.s of novocain with 1000 micrograms of vitamin B12 added. Hydrotherapy was continued and diathermy discontinued. There was a continued improvement until there was a complete cessation of symptoms after two weeks with no recurrence of either condition three months later. Patient was advised to maintain nutrition by carefully balanced diet and vitamin-mineral supplement daily to help to prevent recurrence. Balance therapy will be continued.

Case 4: J. P., a 56-year-old white male, appeared for treatment, complaining of pain and callous on sole of left foot. The patient related a long history of a so-called corn on the outer border of the sole of the foot at the ball. His family doctor had excised the area as completely as possible on two occasions, suturing and redressing with slow healing. Upon examination, symptoms of pellagra were noted, generally, and patient's dietary habits supported a general avitaminosis which would lead to poor healing and epithelization. A diagnosis of keloid was made. Oral vitamin therapy was instituted on direction of the medical clinician and skin planing carried out to remove the scar tissue. Healing was by first intention and the symptoms of pellagra were absent in two to three weeks. Patient was then instructed as to dietary habits and advised to maintain a minimum daily vitamin intake by use of multivitamins. Hydrotherapy and ultra-violet ray was applied to improve skin tone and muscular control in the extremities. When seen ten months after abatement of symptoms, there were no recurrences. Aquasol A cream was used as a dressing with sterile gauze after skin planing and with redressings.[25, 8]

Summary

Over 200 cases were treated by accepted chiropodical methods, supported by local or oral vitamin therapy or both. The result of local supportive therapy was encouraging and that of combined treatment was exceedingly gratifying and should stimulate additional research into this type of approach to therapy for chiropodical lesions. The response of patients in heretofore resistant cases suggests a promise of a better future for our patients.

Acknowledgment

We wish to express deep appreciation to Alexander P. Cambadhis, M.D., of Manchester, New Hampshire, who consulted and reviewed results in all therapy and supervised all cases personally, where there was indication for adjunctive oral nutrition. Without his help and supervision as advisor and clinical chief, this study would have been impossible. We also wish to thank Carol Verovitz, M.D., of Cleveland, Ohio, for a wealth of advice furnished from his vast practice experience. Also, gratitude is due to other medical practitioners from the Manchester area who referred patients and offered constructive advice and criticism to further this work.

We wish to point out that much of our interest in this subject was aroused by other chiropodists, such as Drs. Ignatoff, Brezak, Steinberg, Murphy, et al. who reported on the use of Vitamin A in dermal therapy.

67 W. Merrimack St.

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THE IMPORTANCE OF ANKLE EDEMA IN THE DIAGNOSIS OF CARDIAC AND RENAL PROBLEMS*

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Edema is a condition in which the volume of extracellular water on the outside of the circulating intravascular compartment is increased. Normally there is a constant, equal, well-regulated exchange of water and electrolytes through the capillary wall, from the circulation into the interstitial spaces and returning to the circulation. The factors controlling this balance are:

1. The concentration of proteins in the serum.
2. The concentration of protein in the interstitial tissues of the body.
3. The hydrostatic pressure in the capillaries.
4. Tissue tension.
5. The flow of lymph.

These are general factors in the normal maintenance of fluid equilibrium. In addition there are specific factors which may be listed; these are:

1. Hormonal:
   a. Production by the posterior pituitary gland of a water retaining hormone.
   b. Production by the cortex of the adrenal gland of a sodium retaining hormone.
2. Excess sodium intake.
3. Failure of hepatic synthesis of albumin as seen in cirrhosis.
4. Increased permeability of the capillary membranes as seen in inflammatory edema and angioneurotic edema.

The distribution of edema may be a rough index to its cause. Unilateral edema of a leg or of an arm may be caused by obstruction to vascular or lymphatic channels. The edema of lowered serum proteins as seen in kidney disease is likely to be especially marked in the eyelids and the face. The edema of heart failure is more striking in the legs.

Edema may be clinically seen in the following conditions:

1. Congestive circulatory failure.
2. Renal disease.
3. Cirrhosis of the liver.
4. Hormonal edema (Cushings Syndrome).
5. Regional venous obstruction.
6. Inflammatory and angioneurotic edema.

Of these listed causes of edema, by far the greatest and most frequently encountered cause is due to congestive failure of the heart. In this type of fluid retention the greatest amount of fluid is found in the lower extremities. It tends to accumulate through the day and reaches its maximum amount by the evening. With bed rest at night it tends to subside, but does not entirely disappear. Most often there is an associated shortness of breath of a moderate to marked degree. This is due to a concomitant and often preceding accumulation of fluid in the intrapulmonary spaces. In rare instances of severe failure, there may be marked dependent edema with no shortness of breath. This is due to dilatation of the tricuspid valve allowing blood previously dammed in the right side of the heart and causing pulmonary edema, to pool in the liver thus relieving the pulmonary symptoms, but having no effect upon the edema.

The causes of edema formation in congestive circulatory failure are many and varied, some of the more important and accepted are:

*Presented at N.A.C. Annual Meeting, Aug., 1957

1. Slowing of kidney blood flow with resultant decrease in filtration through the glomeruli.

2. The elaboration by the posterior lobe of the pituitary gland of a water retaining hormone.

3. The production by the cortex of the adrenal gland of a sodium retaining hormone.

4. Increase in the capillary pressure.

5. Increase in the renal venous pressure.

6. Excess sodium intake.

Renal disease may cause edema in two manners. First, and by far the more frequent, long standing renal disease is ultimately manifested by hypertension and in these cases edema may appear as the terminal factor in chronic congestive failure as previously described. The second type is primarily renal in origin and is due to nephrosis with profuse albuminuria. The constant loss of albumin via the urine will ultimately lower the serum albumin and result in edema. In these cases while leg, ankle and pedal edema may be marked, there are also varying amounts of generalized edema found in the face, in the eyelids and abdominally. In contrast with cardiac edema there may be little or no shortness of breath and the swelling is most pronounced in the morning. This latter type of swelling is called the nephrotic syndrome and may be due to several causes acting upon the kidneys, these are:

1. A phase of glomerulonephritis.

2. Generalized amyloid disease.

3. Syphilis.

4. Diabetes Mellitus with intracapillary glomerulosclerosis—the so called Kimmelsteil-Wilson Syndrome.

5. Disseminated lupus erythematosis.

6. Drug reactions.

The possible causes for the formation of edema fluid in renal disease are to some extent in the end similar to the causes of edema in congestive failure and in addition the following:

1. Increased glomerular permeability to albumin with massive albuminuria and hypoalbuminemia.

2. Increased secretion of antidiuretic substances and of mineralocorticoids.

3. Failure in the hepatic synthesis of albumin.

Liver disease may manifest itself by ankle edema. The clinical incidence of this type of edema is the same, or possibly slightly more frequent than the edema of renal disease. The most important physiologic factor in its occurrence is the decrease in serum proteins and particularly albumin due to the inability of the damaged liver to synthesize these materials. Along with this failure is a retention of sodium. The clinical picture in the advanced case is striking; the face, shoulders and chest are thin and wasted, the abdomen is tremendously distended and protuberant; the edema of the lower extremities may be massive and may extend up along the abdominal wall. In addition varying degrees of jaundice may be noted in the skin or in the sclera of the eyes. A history of excessive intake of alcohol can usually be elicited and along with the alcoholic excess will be a diminished food intake, especially of protein.

The edema of regional venous obstruction, as previously mentioned, is most often unilateral. However, in the case of edema secondary to varicose veins it is more often bilateral. Tumor growths pressing upon or obstructing the return of blood to the vena cava will produce edema. Prolonged sitting will cause stasis of the blood and consequent edema. The edema encountered in the latter stages of pregnancy is also a manifestation of venous obstruction.

In a similar manner various causes of lymphatic obstruction will result in ankle

and lower extremity swelling. This lymphatic obstruction may be seen with tumors of the inguinal region, with filarial infections and with chronic idiopathic lymphangitis. Most often there are no associated physical findings other than the local evidences of edema.

Nutritional edema is an uncommon cause of swelling of the lower extremities unless associated with chronic debilitating illnesses as malignancy, severe long standing infection or the previously mentioned hepatic cirrhosis. The factor responsible for the production of edema is primarily a decrease in serum proteins with a resultant flow of water through the intercapillary spaces into the interstitial spaces. Here, too, the lack of various vitamin substances necessary to maintain the integrity of the capillary wall is a factor in the occurrence of edema. The skin changes of pellegra and scurvy may be noted in the ankles accompanying the edema.

Inflammatory edema may be easily recognized by the additional evidences of local tenderness and increased local warmth.

The causes of ankle edema have been discussed and an attempt has been made to explain the causes of these swellings. In so doing, the title has not been adhered to strictly. While, as mentioned, edema of the ankle due to systemic disease is most frequently secondary to cardiac disease, the renal and hepatic, as well as local causes, cannot be easily dismissed. It would be well, when seeing a case with edema of the ankle not associated with trauma or other local causes, to bear in mind the aforementioned causes of edema.

104 S. Michigan

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HEMATOLOGY IN RELATION TO EDEMA OF ANKLES*

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IN NOTING the changes in the feet in diseases of the blood and blood-forming organs, the general effects will be noted rather than edema alone. Lesions may be

a. Circulatory, (congestive, as in polycythemia or localized lymphoblastoma) or mechanical or chemical, as in anemia with myocardial insufficiency.
b. Nerve lesions, as in pernicious anemia (death of sensory nerves, loss of sensation, decubitus ulceration).
c. Uric acid (gout-like lesions) as in polycythemia vera or leukemia.
d. Infective, as in agranulocytosis, agammaglobulinemia, or in leukemia with grossly immature leukocytes.
e. Hemorrhagic, as in thrombocytopenic purpura (decrease in blood platelets) or allergic purpura, hemophilia, with prolonged coagulation time, circulating anticoagulants, hereditary hemorrhagic telangiectasis.

In specific diseases, we may note blotchy brownish pigmentation and vitelligo in pernicious anemia, loss of sensation, numbness, tingling or decubitus ulcers.

In leukemia there may be many types of skin lesions, purpura, progressive reddening and thickening of the skin or thinning and atrophy, painful periosteal infil-

*Synopsis of a presentation at N.A.C. Annual Meeting, Aug., 1957

trations, bone and joint lesions, edema associated with anemia or tumor pressure or protein deficiency.

In polycythemia vera there may be thickening or occlusion of peripheral arteries with gangrene, acroparethesias, Raynaud's syndrome, obliterating thromboangiitis, erythormelalgia (reddening, swelling and pain) congestion and erythrocyanosis, purpura, pruritis, pain in bones and joints from gouty phenomena or hyperplastic marrow expansion pressure.

In sickle cell anemia the bones or joints may be tender and there may be chronic leg or maleolar ulcers.

In hereditary hemolytic jaundice (congenital spherocytosis) there may be pigmentation of the skin about the ankles, chronic ulcers over the internal or external maleoli, and occasionally polydactylia or brachydactylia may be noted.

From the point of view of operative procedures, the loss of sensation, in pernicious anemia, the tendency to bleed in hemophilia, purpura, polycythemia and leukemia and the nutritional and circulatory factors in the anemias, are factors which must be considered.

FOOT SURGERY SURVEY

Our Foot Surgery Committee chairman, Dr. Lester A. Walsh, is conducting a survey. The purpose of this is to set up post-graduate instruction courses in foot surgery in different areas of the country. This requires your cooperation. Would you please fill in, tear out and mail the questionnaire, which can be found facing page 646 following the annual index. This can be done without mutilating your JOURNAL.

"Work keeps at bay three great evils: boredom, vice and need."

Voltaire

CLINICALLY SPEAKING

A place for the more informal presentation of reminders, suggestions, notes, observations and technics of value in office practice. Your contributions of short manuscripts or illustrative case histories will determine this section's usefulness.

MALIGNANT MELANOMA

A Case History

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On May 13, 1957, H. C., a 68-year-old Negro male Pullman car cleaner, presented himself for treatment with the complaint, "I have a black place on the ball of my right foot that has been bleeding." The black macular pigmented area had been present for several years and only within the last 30 days had the bleeding been present. Pain had been very mild.

Plantar surface of the 1st MP joint right foot is the sight of the primary lesion with satellite pigmentation toward the mid-line of the foot over the 2nd and 3rd metatarsal head areas and interdigital spaces. Under the head of the 2nd metatarsal was noted a thick hard crusty callus about 4 to 5mm in diameter.

Primary lesion was a soft elevated pigmented mass from which hemorrhage could be elicited with light pressure. Its long axis was approximately 10mm in length and had indurated edges. The surrounding pigmented skin and secondary lesion involved a total area of approximately 7.5 cm x 4.5 cm.

A secondary lesion was uncovered upon removal of the apparent callus under the head 2nd metatarsal (a thin serous exudate was drained) and the resulting underlying ulcer had a necrotic base with a strong odor.

Satellite pigmented spots were found on the dorsum of the foot, about the ankle and two apparent lesions on the leg.

DP and lateral x-ray views revealed no apparent osseous involvement.

Laboratory tests revealed: CBC within normal limits; Sedimentation rate, 1.5mm/5 minutes (normal 1.0mm/5 minutes); Urinalysis normal; Wasserman negative.

Treatment on first visit was a sterile dressing with instructions to return to the office the following day for further studies.

A decision to obtain a biopsy specimen was made because of the normal laboratory reports with the exception of the slightly elevated sedimentation rate and because of the draining ulcerated area under the 2nd metatarsal head.

Fig. 1 Malignant Melanoma

After the usual pre-op scrub and draping, 2cc novocain with 1:50,000 suprarenin was injected under the primary lesion. Two semi-elliptical incisions of approximately 8mm were made extending to the margin of the lesion and the specimen

sharply dissected away. The resulting wound being of rather large proportions and the tissue being very necrotic, two 000 silk sutures were used to approximate the edges. A sterile dressing was applied and the specimen placed in a 10% solution of formalin. A description and location of the lesion was included with a clinical diagnosis of melanoma, on the biopsy request order. Neither the term malignant nor benign was included with the clinical diagnosis.

Palpation of the popliteal and inguinal lymph nodes were unrewarding except for a very slight increase on the affected side in the inguinal nodes.

The patient was instructed to return to the office two days later (May 16, 1957).

The pathologist's report was received May 15th and was as follows:

> Gross specimen consists of a single irregular block of deeply pigmented tissue 8mm in the long axis.
>
> One transverse section blocked.
>
> Microscopic examination: Examination shows skin covered in part by an intact squamous epithelium. Throughout the dermis and the epithelium there are infiltrating nevus-like cells. These show wide variation in size, shape and staining content, looseness of structure, and copious melanin pigment production. Mitotic figures are present. There is considerable attending chronic inflammation.
>
> This lesion extends to the apparent margin of the biopsy.
>
> Impression: Malignant melanoma (from foot).

The patient reported the morning of May 16 for photographs for our records. A surgical pathologist was called in for consultation. The specialist suggested immediate hospitalization, chemo-therapy and further studies to determine the extent of metastasis.

Further studies revealed metastasis had not as yet involved the knee lymph nodes. The decision to perform a below-knee amputation was made. Following the amputation the wound is healing normally and the patient's mental attitude is very good.

We have discussed a rare malignant condition more frequently in negroes, especially when located on the plantar surface of the foot.

The mortality rate is high once metastasis has started, regardless of treatment. Early diagnosis is essential in these cases to insure proper and early treatment.

303 Medical Arts Building

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INJECTION THERAPY FOR LIGAMENTOUS STRAIN†

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This is a preliminary report concerning the use of a proliferating agent (Sylnasol)®[1] for the purpose of strengthening and shortening chronically strained ligaments in the foot and ankle.

Sylnasol is primarily a soap containing the sodium salts of certain fatty acids.[1] These are combined in a 5% solution with benzyl alcohol 2% to give the final product.

This drug was tried soon after its chemical analysis in 1934 by Rice,[2] who was searching for an injectable in the treatment of abdominal hernias. Soon after

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®[1] G. D. Searle and Co., Skokie, Ill.

his research was published, other men applied this concept of strengthening white fibrous elastic tissue.

Schultz[3] in 1937 reported a series of 200 cases of chronic subluxation of the temporomandibular joint successfully treated with intra-articular injections of Sylnasol. He also showed through animal experiments that such injections produced no alterations in the joint cavity and no destructive changes in the synovial membrane, but merely thickened the involved ligamentous tissue. He later demonstrated clinically that these capsular ligaments were actually shortened as well as strengthened.

Work by Hackett[4] has demonstrated the effectiveness of Sylnasol in chronic back conditions where increased ligamentous support alleviated various lumbosacral and sacroiliac problems. Animal experiments by Hackett and Henderson[5] showed a hyperplasia of the collagen fibers in the injected areas with the new tissue microscopically indistinguishable from the original fibers.

Allergic reactions have been reportedly rare. In a series[6] of 25,000 injections given to 5000 patients for the sclerosing of varicose veins, only five reactions were observed: four with a local dermatitis and one with anaphylactic shock.

The drug produces its effect by stimulating the fibroblasts in the ligaments through an inflammatory reaction.[2] Typical signs of inflammation as pain, swelling and heat are often seen but are usually mild and well tolerated by the patient.

My findings have shown the drug to be very effective in chronic ankle sprains and in patients with "weak" hypermobile ankles. The results thus far in strain foot conditions wherein the medial plantar ligaments were injected have not been too satisfactory. This I feel can be improved upon with variations in the present technique.

At present I am using a combination of one part Sylnasol to three parts pontocaine hydrochloride .15%. A .3cc injection of this combination every 10 days to two weeks has given satisfactory results with a minimal amount of discomfort. The average number of injections per ligament varies between two and four.

The most important consideration in this type of therapy is the injection of the drug into the affected ligament and not into the surrounding tissue. Although there is little or no danger to these surrounding tissues, the therapeutic effect of the treatment will be greatly reduced or lost as a result of a poor injection.

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"Labor to keep alive in your breast that little spark of celestial fire—conscience."

George Washington

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Address all communications intended for publication, matter relating to advertising, business or subscriptions to the above address.

PRESIDENT'S MESSAGE

For too many of our practitioners, success has been an elusive commodity. Too few of our practitioners have achieved a satisfactory degree of economic security, professional prestige and spiritual satisfaction. Our National organization is deeply concerned for the welfare of these men. Accordingly, we have endeavored to look into the reasons for broad success by some and less auspicious accomplishment or satisfaction by too many others. An analysis of the successful reveals a common fabric.

First and foremost, these men have determined to make themselves well trained and highly skilled in the practice of their profession. These are the men who regularly attend regional meetings, postgraduate seminars, national conventions, and take the time to read and analyze the scientific material that is presented to them. These are the men who meet the other men of accomplishment and exchange with each other their philosophies of practice, their methods of approach and their therapeutic armamentarium. These are inevitably the men who not only take an active interest in their organizational affairs but also make contributions to the growth and development of the profession itself. These are the men who develop a high degree of self-confidence in themselves and their profession and have gained sufficient erudition to have achieved an increasing humility. These are the men who have made it possible for your organization to aspire to the new heights for which it currently appears to be destined.

To the dissatisfied gentlemen of our profession, let me urge upon you to take advantage of every conceivable assistance of which your National organization is in a position to offer. The quality as well as the quantity of this assistance is ever increasing.

We hear a great deal about economics. In our free enterprise system, this term implies a fair return after investment. It establishes as axiomatic that the investment must precede the return. It, therefore, behooves those of us who are engaged in a branch of medical practice to evaluate the nature of the investment that is required of us in order to receive a fair return. The scholarly professors under whom it was our privilege to be trained have done well to impress upon us that our investment is a variegated one. We must invest considerable of our intellect, of our dedication, of our enthusiasm and vitality, and all of these re-

quire time. Further, because we are blessed with a free enterprise system, we must invest our dollars. We are in the business of serving the ill, of alleviating pain and of comforting the distressed. The returns we seek are spiritual, professional and, incidentally, economic. Our return can be only proportionate to our investment.

A great philosopher, the late Reverend Russell Conwell, founder of Temple University, in his "Acres of Diamonds" articulated this philosophy with eloquence when he said that to each of us could come an abundance of the fortunes of living (spiritual and material) if we would but look about us and invest in ourselves.

It is within your grasp to achieve for yourselves the economic, social and spiritual satisfaction for which you aspire as a member of our growing and dynamic profession, dedicated to the foot health of our great nation.

To each of you and your family, my wife and son join with me in wishes for a very Merry Christmas and we urge you to share our optimism for a very Happy New Year.

Jonas C. Morris, D.S.C.

"CLINICALLY SPEAKING"

Over a year and a half ago, the section of Clinically Speaking was established in the *Journal*. This section was designed to provide space for short articles on new techniques, refinement of old ones, office short cuts, interesting case histories and similar subjects. It was felt that many of our readers have some information that they should pass on to their colleagues, but find themselves unable to devote the necessary time to prepare a large paper.

We are calling this to your attention so that those of you who have put off writing up your favorite "gimmick," device or technique, will no longer be able to salve your conscience by saying you do not have time to write a long, carefully prepared paper.

SEASON'S GREETINGS

It is a pleasant paradox to contemplate that winter's cold weather starts with the year's warmest season.

Everyone at national headquarters, and their families, wish all of you and your families, the warmest, most joyous season. May all of us partake of and participate in the coming glorious year.

OBSERVATIONS FROM WASHINGTON

Convention

On To Washington where the next convention will be held August 22-28, 1958! It isn't too early to outline your trip. Bring all the family with you this time, for there are many things in and about Washington to see and learn. For example, the White House, the Capitol, Mount Vernon, Williamsburg, the libraries, the galleries, the memorials, are only some of the sights.

The Congressmen are not likely to be here at that time, because it will be election year, and Congress will plan to adjourn in July or early August so that the members may go home to campaign for reelection.

In many ways, Washington is the most wonderful convention city in the country, and it is readily accessible by air, rail, bus and car.

Congress

Members of the 85th Congress will return to Washington between now and January 2, when the Second Session will convene. The bills whose introduction we reported to you this spring and summer, and of which you have heard little or nothing since, will receive committee attention. They aren't dead yet. It is to be hoped that you have been talking with your Congressman about them while he has been home. There may be many occasions during this final session when you will want to have the cooperation of your Congressman. Some of the bills that are in the hopper, in addition to the one reported to you in which schools of podiatry were not mentioned among those to be considered for financial assistance, are Jenkins-Keogh retirement plan; hospitalization for the aged; compulsory health insurance; Federal workers' health insurance; and vocational rehabilitation. There are many others, and if and when they are considered by the reference committees, the date of the hearings will be reported in this column.

Medical Education

The Secretary of Health, Education & Welfare, Mr. Folsom, has expressed considerable concern over the lack of interest shown, especially by Congress, in the development of our medical schools. In a recent address made before the Association of American Medical Colleges, Mr. Folsom said that "A recent study showed that six New York and Washington newspapers, over a period of 15 weeks, carried more than 14,000 column inches on the general subject of Health. Further, it has been reported that in just a few months more than three out of four Americans have learned about Asian flu and the production of a vaccine against it. We may well ask, among the thousand or so articles on Health, how many mentioned medical education? And among the hundred million or more people who know about Asian flu, how many know about the plight of medical schools and their own great stake in this problem?"

We are proud of our achievements in the health field. Miracle drugs and wonder cures have duly impressed us. We have not hesitated to appropriate large sums of money for research. But few thoroughly appreciate that research originates in the laboratories of the medical school. Its results may be applied and put to practical use by further research in industry. Thus, the average American is not in a position to realize the function of the patient professor who originates and imparts knowledge and skill both to the research scientist and the doctor. Mr. Folsom illustrated this fact by stating that in the past ten-year period medical research expenditures have increased almost three times as fast as expenditures for medical education. It is unfortunate that the function of the medical school should be thus shadowed by the profits of research.

Mr. Folsom suggested that the complications of the medical school are multiplying. Within the next ten years, there will be an enormous increase of the population of college age. The average student pays only a portion of the cost of his education. Therefore, provision should be made for the enlargement or increase in number of our medical schools and also for their financial assistance. Many schools have in recent years made a special project of training young men to be doctors by contracting with them to serve a stated period of time under Government supervision. Some have raised objection to a program of this kind, and there is reason for giving the matter more careful study. A student is not trained to be a physician for his own private advantage, but he becomes an unofficial agent of the community when he restores health to a citizen or his family and when he arrests the progress of an epidemic.

In his effort to advance the interests of medical education, Mr. Folsom does not lose sight of other branches of education. On another occasion, he said, "It is not enough as some may suggest in these times simply to invest more money and more materials in the production of missiles, satellites or other products of this remarkable scientific age. These are vital concerns, to be sure, but these are *end* products. Over the long term our *fundamental* concern should be to invest sufficiently and wisely in the training of highly skilled and broadly responsible men who make these and many other end products possible."

As further evidence of the Secretary's seriousness in the matter of developing our educational program, it was announced recently that a group of expert consultants to advise the Office of Education on its program in basic statistics has been named. Consultants will serve in an advisory capacity to the Commissioner of Education, giving priority to problems of estimates and projection of trends in education and the application of the best modern statistical methods and techniques. In Mr. Folsom's opinion these outside authorities will be performing a most useful function in helping to strengthen our programs to provide adequate current data on education. The consultants will take several months with their study, but they should be of material assistance to States and local communities attempting to solve the many difficult problems that confront them in education today.

Children's Bureau

The Children's Bureau last week invited a group of experts to discuss how to make the wisest use of x-rays in the care of children and pregnant women. In the discussion it was brought out that often parents press for an x-ray in the mistaken idea that an examination is not complete without it. One participant said, "Some of our patients now ask us for x-rays just as they have been asking doctors for a shot of penicillin for a cold." The group was sharply critical of the use of x-rays in the fitting of shoes. They were told that a number of States have outlawed the use of x-rays for this purpose and that measures against this practice are being considered in other States.

National Health Survey

On previous occasions we have reported the commencement of a National Health Survey. We have had an opportunity to discuss with the committee that is conducting the Survey the importance of having data collected on foot health.

It was pointed out to us that the Survey as begun will be very general, and as the information is collected and classified, it is to be expected that foot health will be an important part of the findings. The Survey has progressed to the point where the Surgeon General of the Public Health Service has felt it necessary to have the assistance of an advisory committee composed

of representatives of health professions, insurance organizations, safety interests, labor, industry, and other users of health statistics. The Survey is a continuing program that may go on indefinitely under which the Public Health Service makes surveys and studies to determine the incidence of illness and disability and gather related information. Household interviews of a sample of the population are now being conducted Nationwide.

Research Grants

In the first four months of the current fiscal year, the National Institutes of Health made research grants totaling more than $46,000,000, as is shown by the following statement:

	No. of Grants	Total Amount
National Cancer Institute	384	$ 5,998,111
National Heart Institute	642	9,601,557
National Institute of Allergy and Infectious Diseases	620	7,666,510
National Institute of Arthritis and Metabolic Diseases	579	7,137,003
National Institute of Dental Research	105	968,892
National Institute of Mental Health	189	3,938,065
National Institute of Neurological Diseases and Blindness	357	4,740,663
General (Division of Research Grants)	449	5,981,015
	3,325	$46,031,816

Small Business Administration Funds

Through Small Business Administration funds, it has been made possible for individual physicians to secure loans for research or developmental work. This function of Small Business was authorized by Congress recently. A podiatrist in Washington who took advantage of the new law informs us that Small Business guarantees a proportion of the loan which the applicant secures for himself through his bank. Other practitioners and the schools might find it profitable to consult the Small Business Administration concerning their needs.

Asian Flu

An estimated 8,500,000 persons throughout the country had colds, sore throats, influenza, or similar diseases severe enough to put them to bed for a week or more during the week ending August 5, Dr. Burney, Surgeon General of the Public Health Service, reports. The average number of persons in bed each day that week as a result of these illnesses was about 2,500,000. A great proportion of these cases were undoubtedly Asian influenza. Dr. Burney pointed out that these figures add another dimension to the information on communicable diseases. The number of persons confined to their beds and the amount of time lost because of these upper respiratory illnesses provide a measure of the social and economic cost of such illnesses which has not been available heretofore.

Vaccine

Asian Flu. On October 31, the Public Health Service announced the release of 7,035,560 centimeters (doses) of Asian influenza vaccine, making a total of 34,192,047 cc's released since August 12, when the vaccine first became available.

Polio. On November 1 the Public Health Service announced that 616,500 centimeters of poliomyelitis vaccine were released during the week ending November 1, making a total of 89.3 million cc's of polio vaccine which has been produced and released since January 1.

False Advertising

On October 31 two Federal agencies announced their intention to take prompt action against manufacturers making false or misleading claims that their drug products are effective in prohibiting or treating

Asian flu. The two agencies are the Federal Trade Commission and the Food and Drug Administration. A spokesman for the Federal Trade Commission said, "It is the duty of the Commission to stop false and misleading advertising. There is no doubt that the Commission will proceed against any person or corporation who attempts to associate its products with a disease it cannot prevent, alleviate, nor cure. In an effort to protect the public, the Commission is actively checking all media of advertising and will move promptly to eliminate any claims that are false or misleading."

Social Welfare

The Social Security Administration announces that public spending for social welfare activities of all kinds in the United States increased during the fiscal year ending June 30, 1956, at the same rate as the total National output of goods and services. The expenditures increased some $32.2 billion the previous year to $34.5 billion in fiscal 1956, largely as a result of the expanded social security program and increased outlays by States and communities for education. Almost 3/5 of the 1956 expenditure ($19.9 billion) came from State and local funds, and a little over 2/5 ($14.6 billion) from Federal funds. Education accounted for an increase of almost $1 billion in fiscal 1956 and took about 3/5 of the State and local dollars spent for social welfare purposes. Old Age and Survivors and Disability Insurance payments increased over $1 billion between fiscal '55 and fiscal '56.

State and Territory Health Officers Meet

At this writing the State and Territorial Health Officers are holding their 56th annual conference with the Surgeon General of the Public Health Service and the Chief of the Children's Bureau. Conference extends from November 3 to November 8 and is being held at the Department of Health, Education & Welfare.

CHIROPODY FOR NURSES

VICTORIA A. AURIENE, R.N., D.S.C.*
Dixon, Ill.

The statisticians give us to understand that about 90% of our populace have some form of foot disorder. This includes one of the vital branches of the medical tree of learning, the R. N. and her auxiliary aids.

1. Student nurse
2. Licensed practical nurse
3. Orderly
4. Nurses aid
5. Future nurses club†

It is my opinion, and I also am an R. N., that my sister nurses have been missed by the foot. One of the prerequisites for entering a school of nursing, is that a prospective student be examined for mental and physical soundness, nary a thought about her precious pedal pads. The school of nursing further requires that the student nurse must wear white shoes and hose. This is part of her uniform.

A Foot Health Survey of student nurses of Katherine Shaw Bethea, School of Nursing at Dixon Public Hospital, was made by myself, March 29, 1957. The shoe wardrobe revealed only two students had all leather kid skin uppers, good fitting, stout, heavy, sturdy soles, 5 toe last, oxford tie shoes. The rest, for the most part, were poorly shod, cradled in synthetic soles and wooden heels or in a solid, formed, wedge like cork or rubber outersole with various other types of leathers for the uppers.

Couple this with a walking surface of hard cement or terrazzo floors, for eight solid hours of pounding. Her day's activ-

*Chairman, N.A.C. Committee on Nursing Relations.
†"The Future Nurses Club" is the newest addition in the field of nurses aids recruits.

ity completed, and you will have a very tired, worn-out nurse with a possible sharp and edgy temper. All this through no fault of her own making, just lacking the knowledge for proper foot care. She will invariably complain of her steaming, burning, aching feet. Too often this is the basic factor for leaving the nursing profession that is sadly understaffed. We know sore feet give rise to a sore mind and body, that will neither function or concentrate accurately. This situation is amendable. The time is now and the job is ours. We must prepare the necessary materials to educate these nurses and her aids, giving them the fundamentals of good foot health. They in turn will spread the gospel that podiatry-chiropody makes life worth-while.

Their feet rest in the palms of your hands. If the medical physician can teach nurses preventive medicine, then it becomes the solemn duty of each and every foot physician to teach nurses preventive chiropody. We must teach nurses how best to care for and use one of God's given gifts, "Her Feet," for she is a walk of life.

This subject should be included as a must in with the regular curriculum of every school of chiropody and made available to the practitioners out in the field.

With the local hospital instructors, I have prepared a paper pertinent to this subject, containing a foot health survey of the entire student body. This is now with a nursing publication being prepared for release. It is our expectation that this will impress the schools of nursing throughout the country and that they will adopt it speedily.

We feel certain that chiropody can provide the priceless missing link to proper foot health for the footsore nurses and their auxiliary aids, thereby making them better women, better nurses, that they may best serve in caring for suffering humanity.

There will be more on "Chiropody for Nurses" from me after the release of the prepared paper and survey in the nursing journal.

Your comments are invited. May I hear from you, please.

221 Peoria Ave.

PUBLIC RELATIONS WITH RESULTS

WILLIAM O. WATTLING, M.T., D.S.C.
Lewiston, Idaho

What does the average chiropodist want from public relations? I believe he hopes and dreams of a program or an article which will be the secret of obtaining greater prestige with the laymen and medical man, and also a rush of new patients to his office. It is fine to hope and dream of these but to expect them is wrong. We must work to make a dream come true. Each city or town must have its own public relations group. Whether a man is alone or practices with others, he is his best hope.

National and state programs are essential and must be supported to the fullest extent. These are the groundwork for the more effective local programs. To pay dues to your association and expect big results is foolish. We must participate. None of us expects a 10.000% return from a stock, but yet we often act as if we do expect that from our association dues.

The prestige we seek can only be achieved by the proof of good, ethical, scientific practice. If we lack in this most important requisite, then I suggest we don't call attention to ourselves. If we do conduct this type practice, then our patients will give us the respect and thus the prestige we seek. The public relations program then becomes, essentially, advertising in an ethical manner.

To apply some principles of advertising to a public relations program may then give us some good ideas. The circulars or

brochures we receive in the mail are usually not read, or if they are, they are soon forgotten. The detail man does a much more effective job of selling us on the product.

What are we trying to sell? Do we have to sell chiropody? I believe not. We do this by our good results in our practice. What then do we sell? It is education. The fact that most people have a foot fault makes all of them potential patients. Now we must try and find a good selling point and what better one than their children's feet. We all know that parents will take care of the child before they will themselves. We have our objective now; to ethically call to the attention of parents the fact that their child may have a foot fault.

To see that the objective is reached then becomes the problem. Can we do this alone in our town, and how, without paid advertising. The objective is one which is of a public health nature, is it not? We should, then, be able to enlist the help of some group which has the town's welfare at heart.

The above were the thoughts of your author and the following is his method of trying to obtain the objective. This program can be applied to most any town and to most any service club, but was designed for the Junior Chamber of Commerce. It is felt this organization should be number one on your list. The Jaycee is a young, active man. Most Jaycees have young children and so take the project to their hearts. The recognition within their organization is obtained by scrapbooks of their publicity. The author club of Clarkston, Washington, took on the project of the "Jaycee Child Foot Clinic" and won first place in state competition in the field of Public Health. This scrapbook went on later to win first place in the nation in the field of public health. The awards are not important except that they prove that what I state is a matter of Public Health.

Program Outline

The first step would, of course, be calling and asking permission for you or several of you to attend a meeting of the desired organization, and discuss the need of a program in public health. Explain why it is important for early diagnosis and how feet are overlooked and so need a special program, explain the high percentages, etc. Be prepared to answer all questions and have the program well in mind. Do not, in trying to sell this program, try and sell chiropody. That is not your concern or purpose. In asking the Junior Chamber you have an additional selling point in that the program also is one of leadership training. This you will understand, as the program is outlined. A Public Health Committee will be set up with the following sub-committees: Publicity, Contact, Speakers Bureau, Clinic and Miscellaneous.

The first step is to obtain several statements from local medical men, county health, etc., in regard to the necessity of foot health examinations. You then have the groundwork for announcement of the forthcoming Jaycee Child Foot Clinic. The operation of the sub-committees are outlined below.

Publicity

To obtain feature articles in regard to the need of foot health. To see that news releases to the press, radio and television are given in regard to obtaining speakers from the Jaycees on the subject of foot health. To see that news releases are given to each medium after a Jaycee speaks to them. To get tapes cut for spot announcements of the facts and the time and place of the examinations. He shall see that these are given and used. Local and surrounding areas should be covered. By designating a place for obtaining speakers, some requests will come in from other areas.

Contacts

This committee shall obtain chiropodists, pediatricians and/or orthopedic men

to donate time for the examination of these children. They shall obtain a suitable hall or building in which to have the examinations. They shall contact all organizations in the community and ask permission to send a Jaycee speaker to talk for a short time on a matter of public health. They shall in turn notify, and see that a speaker is sent to each of these meetings at the proper time. It is well to set examination time in the afternoon and evening so preschool and school age youngsters may attend.

Speakers Bureau

This is essentially, a class in teaching this group of men from your sponsoring club, facts which should be gotten to the general public; signs, symptoms, early diagnosis and the need of treating, etc. The man may make up a canned talk to give to these men but should have several meetings with them to answer any questions they might have. It is really very effective to have these men telling the story for you. A speaker's talk may be supplemented with a pamphlet of some type which he may distribute at the end of his talk, to drive the point home, so to speak. The Clarkston Junior Chamber used such a pamphlet and it was similar to "The Care of Little Feet" in content, but having Jaycee principles outlined. This was done largely through donated art work, but it does involve a cost. It might be well to think of buying some of the pamphlets which are available to us, but cost is something you must work out or sell the club on. The speaker will, along with the educational talk, announce the time and place of the examinations. The clinic should include pre and school age children and make it clear that it is free and diagnostic only.

Clinics

Set up of the clinic itself with tables, chairs, a sign, if necessary, to show location of clinic. The doctors should make up an examination sheet and have it mimeographed; one copy for the parents and one copy for the club to tabulate results, enlist aid with the clerical side of the examination.

Miscellaneous

It is important to have more than enough speakers as many will have several places to talk each night. Plan on running the talks for about three weeks to cover all clubs. Hit hard again, just before the clinic, with spot announcements as a reminder. The number of clinics will be determined by the number of examiners you have.

Remarks

The different aspects of this program are somewhat apparent by this outline but all may not be clear. The parents of the children, with rare exception, attend the clinic with them and will see your demonstration of the fault. You may show them and again do a little in education. They are there to answer and ask questions. The big question asked is, "Doctor, who shall I take Joe to," or "Doctor what should be done for Joe." You must resist the temptation to pull out a business card at this point. Explain that it is strictly a diagnostic clinic and there are many ways of treating it according to whom they may take him. Suggest that he should be taken to a chiropodist, orthopedic man or pediatrician. The examination sheet should likewise indicate that professional care is or is not needed.

To this day, two years, speakers in our town are recognized because of their part in this project. There is a natural tendency not to try to get a speaker into the garden clubs which are composed of older ladies. But remember they have grandchildren, and all listeners are applying these facts to their childhood and their feet. The enthusiasm with which a town will accept this program will be surprising to you. The tremendous amount of publicity the program obtains will likewise astonish you.

513 Breier Building

TECHNIQUES IN FOOT SURGERY

L. R. McCAIN, D.S.C., F.A.C.F.S., and N. H. KETAI, D.S.C., F.A.C.F.S.
Editors, Publications Committee, A.C.F.S.

Illustrated case reports and discussions, suggesting approaches to chiropodical surgery, from the files of the American College of Foot Surgeons.

REMOVAL OF A GANGLION CYST

A white woman, aged 34, seen in the office, presented a palpable mass along the extensor tendon to the great toe of the left foot. The enlargement of the mass had taken place over a period of years, and the area was very uncomfortable when the patient wore shoes.

Urinalysis indicated it was negative for albumin and sugar.

Blood findings indicated hemoglobin 14 Gm., W.B.C. 6,800; R.B.C. 4,800,000.

The patient was given Sodium Seconal 1½ grs. thirty minutes prior to anesthetic.

After sterile technic was used the procedure was as follows: Anesthesia to the area was affected by use of procaine 2% plain in the amount of four cc. A linear incision approximately five and one-half centimeters long was made over the growth. By blunt dissection the tissues were separated from the ganglion. The base of the ganglion was grasped with a hemostat and sharp dissection was used along the dorsal surface of the tendon sheath. The ganglion was removed and the tissues coaptated. Closure of the wound was effected with four interrupted 000 dermal sutures. A dry sterile compression dressing was applied over the wound. The patient was given 400,000 units Penicillin SR I.M.

The patient was given Empirin Compound No. 3, Sig. one q. 3 hr. for pain.

Postoperative treatment was as follows: Two days following surgery the outer dressing was removed and a new compression dressing applied. Six days later the sutures were removed and a dry sterile dressing applied. The patient was dismissed at the end of seventeen days, and when checked a year later there had been no recurrence.

James W. Hembree, D.S.C.

Comments: This is a typical procedure for this type lesion; however, whenever removing a growth or tumor it should always be sent for a pathology report.

L.R.M. and N.H.K.

REMOVAL OF A MALIGNANT SYNOVIOMA

A white man aged 28, seen in the hospital, presented the following symptoms: A snapping, shooting pain between the third and fourth toes of the left foot, with the pain radiating to the end of the toes.

The onset of the pain had been sudden, and he had been unable to wear foot gear comfortably for about a month.

A preoperative diagnosis of a neurinoma was made.

A urinalysis revealed the following: Color —yellow, PH.—7.5, Sp. Gr. 1.01, Turb.—Cloudy. Laboratory findings of the blood was as follows: Hemo.—14 Grams, W.B.C. —7100, R.B.C.—4,350,000 The preoperative blood pressure and temperature were normal

The patient was given 1½ grs of Sodium Seconal as a preanesthetic medication.

Procedure: After the field was made surgically sterile anesthesia to the area was effected by use of Monocaine 1% with 1:100,000 epinephrine in the amount of 6 cc. The field of operation was rendered

bloodless by using esmark bandage. A dorsal web splitting skin incision was made between the third and fourth toes just anterior to the metatarsal heads, and carried posterior to the metatarsal heads 1.0 cm. By a combination of sharp and blunt dissection, the incision was deepened toward the plantar surface of the foot, and between the bases of the proximal phalanges of the third and fourth toes. The encapsulated growth was resected by sharp dissection. The subcutaneous tissue was closed. The growth was approximately 25mm x 12mm x 15mm in size. The wound was closed with four 000 dermal sutures, and a sterile compression dressing applied.

Postoperative treatment was as follows: On the third day postoperatively the outer dressing of the wound was removed, and a new sterile dressing applied. On the tenth day the sutures were removed and sterile dressing applied. On the fourteenth day after the operation when the pathologist's report showed this growth to be malignant synovioma a block section of the third and fourth metatarsal shafts and the third and fourth digits was performed.

Neil Jacobs, D.S.C.

Comments: This is one of the instances which shows the importance of having a pathology report on any growth or mass which is removed from the foot.

L.R.M. and N.H.K.

PHARMACEUTICAL PREPARATIONS FOR THE PROFESSION

HARRY L. HOFFMAN, Ph.G., D.S.C.
Chairman, Council on Chiropodical Therapeutics and Pharmacy

A column devoted to preparations, new and old, with emphasis on their value and uses in everyday chiropody practice. This is a regular monthly column prepared from information furnished by the pharmaceutical house. We invite questions, which we shall endeavor to answer, or obtain the answer.

EMERGENCIES IN YOUR OFFICE AND WHAT TO DO

HARRY L. HOFFMAN, Ph.G., D.S.C.
Washington, D. C.

In the August issue of the JOURNAL, on page 388, there appeared an excellent article, "Complications of Local Anesthesia," by H. L. Collins, D.S.C. It should be read by every practitioner and kept as a reference.

In conjunction with this we will now go a step further and describe a very useful item to be had and kept ready in your offices for emergencies.

We all use local anesthetics frequently. All local anesthetics are potentially dangerous. Reactions, circulatory or respiratory depressions, may result following the administration of these drugs. These reactions require prompt remedial treatment.

Novocol Chemical Company, 2911-23 Atlantic Ave., Brooklyn 7, N. Y., producers of Monocaine Hcl. anesthesia, are the producers of a very useful kit or carrying case, containing twelve assorted emergency therapules and a midget (1 cc.) anestube syringe. Three different kinds of stimulants are included.

Description: Four therapules each of Atropine Sulfate 0.4 mgm., Phenylephrine 1;500, and Caffeine Sodium Benzoate 7 grains.

The shelf life of the three sterile solutions is one year. The cost for a box of assorted (12) emergency Therapules is modest as is the midget anestube syringe (1 cc.) and bottle of 100 Pembules (¾ gr.).

The Pembules are ¾ grain each Pentobarbital Sodium. These are for premedi-

cation. A capsule about ½ hour before injecting the anesthetic will decrease the irritability of the cerebral cortex and make a convulsive reaction much less likely.

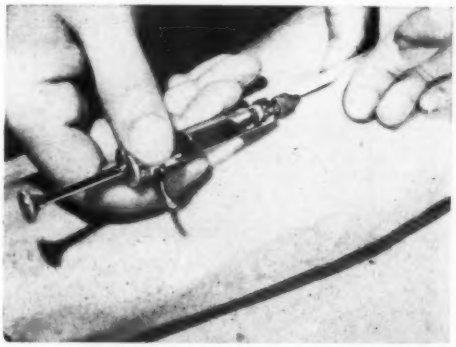

Fig. 1 Midget Anestube Syringe

Nembutal ¾ grain can also be used as above if Pembules are not on hand. To insure the Podiatrist of a fresh supply each year, the Novocol Chemical Company has an automatic renewal service annually. One year from the date of the first shipment, a fresh supply of 12 Therapules is sent to the doctor. The charge is made through his regular chiropody supply dealer.

It is our opinion that every podiatrist who uses anesthetics in regular office practice, should have these ready to use sterile solutions and a midget cartridge syringe, if for no other than a "legal" reason.

1098 National Press Building

DIAGNOSIS AND TREATMENT OF ANESTHETIC REACTIONS

Diagnosis	Treatment
Circulatory Reaction—Mild	
Faintness, dizziness, pallor, rapid and weak pulse.	Aromatic spirits of ammonia, lower head below heart, inject 1 therapule of caffeine sodium benzoate subcutaneously (anywhere in the body).
Circulatory Reaction—Severe	
Tingling in skin, loss of consciousness, absent pulse and blood pressure, pallor, gasping breath.	Inject 1 therapule 0.2% or atropine 1/150 gr. intravenously or subcutaneously; repeat in 2 minutes, if no response. Oxygen. Strike chest sharply over heart several times.
Respiratory Reaction	
Sudden cessation of breathing, cyanosis, pulse detectable.	Artificial respiration. Oxygen by mask. Atropine if necessary.
Convulsive Reaction	
Convulsive movements, especially in extremities. Pulse detectable. Respiration continues.	Inject intravenous sodium thiopental 0.2% slowly until convulsions cease. Best avoided by premedication with Pembules of Sedadex. (*) Oxygen should be used.

(*) Sedadex in bottles of 50, by Novocol Chemical Co.

If confronted with a convulsive reaction, stop injecting the anesthetic at once, and withdraw the needle.

ABSTRACTS FROM THE CHIROPODY LITERATURE

ROBERT SHOR, D.S.C.
LOS ANGELES, CALIF.
Chairman, Committee on Publications

Editors of Local, State and Regional Publications are requested to provide copies to the Chairman of the N.A.C. Committee on Publications who is preparing this section of the Journal.

HOME HYDROMASSAGE FOR THE GERIATRIC

Milton Werbel, New York J. of Pod., 9:14-15, Sept. 1957.

The simplest and safest mechanism for the treatment of the geriatric patient is hydromassage. This method of therapy is usually applied to the patient in a practitioner's office or in a hospital. Application is performed through the use of whirlpool baths designed for this purpose. However, this form of treatment, while efficient, creates a problem for the geriatric for the treatments are necessarily given daily. The inability of these patients to travel distances and the expense of these treatments, have always been a deterrent to their undergoing complete therapy. To solve this problem, home treatment must be instituted.

Early this year a new non-electric machine was introduced for home use. This machine consists of a small aluminum tank that is placed in the bathtub. Through the arrangement of a fish-tail device this is connected with the bathtub faucet. A thermometer attached to the side of the tank is available so that the patient may readily control the temperature of the water. The water pressure in this tank can be regulated by increasing or decreasing the flow of water through the faucet. Through an ingenious device called a Venturi Tube, the water is mixed with air in proper proportions to simulate the standard hydrotherapy machine.

The use of the machine has many advantages such as safety and simplicity of use for the inexperienced. Of prime importance is, of course, the fact that the machine is inexpensive and practical.

PYROGALLIC ACID FOR VERRUCAE AND NEUROFIBROMATA

Samuel Brezak and Allen J. Sloane, New York J. of Pod., 9:11-13, Sept. 1957.

Brezak and Sloane present a clinical evaluation, along with four case histories, on the use of 50% Pyrogallic acid ointment for resistant verrucae and neurofibromata. The compounded ointment used is: Pyrogallic acid 50%; Chloral hydrate 5%; Petrolatum qs —.

The procedure of application is similar to the standard aperature padding for verrucae. The patient is instructed to return every 4 to 6 days at which time the procedure is repeated. This mode of therapy is repeated until the patient complains of severe itching, or possibly pain, which usually occurs at the second or third visit. All necrotic tissue is debrided until a healthy pink base with non-adhering walls is noticed. A mild stimulating ointment (Vit. A & D; Bacimycin; etc.) is then applied.

Brezak and Sloane state that this procedure offers an excellent method of therapy for those verrucae which have proven refractory to conventional methods of treatment.

PAIN IN THE HEEL

J. Gallocher, *The Chiropodist,* 9:296-307, Sept. 1957. (London).

Gallocher presents a thorough review of the subject of heel pain. The review commences with Anatomy and Function and

then discusses the general etiology of heel conditions. Many factors, whether of exciting or predisposing origin, can affect the heel tissues and cause pain. However, it appears that the one constant factor is mechanical trauma. The phases of etiology reported are deformities and arthritic conditions, valgus and varus foot, flatfoot, cavus foot, and bony foot. Also discussed by Gallocher are the various toxic and infective conditions of metabolic, degenerative, vascular, and nervous origin that may cause heel pain.

The pathological changes affecting heel tissues are divided into, 1.) inflammatory—traumatic, infective, and toxic. 2.) Non-inflammatory edema. 3.) Hyperplastic. 4.) Retrogressive—degenerative. 5.) Neoplastic (uncommon), and 6.) Metaplastic.

The major portion discussed under treatment is devoted to paddings which take into consideration (a.) Correction, (b.) Compensation for structural weakness, and (c.) The local deviation of stresses by accommodative pads.

NAILS

S. Pitts, *Chiropody Review*, 8:14-17. Aug. 1957. (London).

Pitts presents a short review of nail histology and nail hygiene. The major portion of this article deals with a glossary of terms related to nail conditions and, wherever possible, a method of treating them. Such terms as hyperkeratosis subungualis, Usure des ongles, Pterygium, Onychomadeses, and onychoheteropia are discussed, to mention a few.

BOOK NOTICE AND REVIEWS

APPLIED FOOT ROENTGENOLOGY

By Felton O. Gamble, D.S.C., F.A.S.C.R., Formerly, Professor of Roentgenology, Temple University, School of Chiropody; Past President and Fellow, American Society of Chiropodical Roentgenology; Honorary Fellow, American Academy of Chiropody; Past President of the National Association of Chiropodists, $15.00, 414 pp., 411 illustrations, The Williams and Wilkins Company, Baltimore, Maryland, 1957.

Dr. Gamble's book will be reviewed in a future issue of the JOURNAL.

CHIROPODY AS A CAREER

By Wilfred E. Belleau, Ph.D., Life Advisement Department, Boy's Technical High School, Milwaukee, Wisconsin; Honorary Member of the Wisconsin and National Association of Chiropodists. $.75, 27 pp., Park Publishing House, 4141 W. Vliet Street, Milwaukee, Wisc., 1957.

The Monograph, "Chiropody As A Career," completely revised this year, includes several new sections and, in general, supercedes previous editions. It contains an excellent source of material for the promotion of vocational guidance and establishing better public relations. Inasmuch as the information supplied should benefit and educate more people to chiropody, its interest and appeal created should be a deciding factor for young men and women to choose chiropody as a career.

Commencing with a history of the profession, there are phases devoted to the basic requirements, curriculum, clinical experience, the specialties, with emphasis placed on the extensive training, practical and theory, obtained by the students of chiropody. Along with additional sections as, "A Day's Practice," Opportunities, and the new phase "Recognition," this monograph provides a substantial basis for a more chiropody-conscious public which affords the young adults of America the opportunity of entering one of the least crowded professions—chiropody.

Herein lies an opportunity for the state associations to secure copies of this latest revised monograph.

Jonas C. Morris, D.S.C.
President, N.A.C.

NARCOTICS, ANTIBIOTICS, THE PRESCRIPTION AND ITS ARITHMETIC

Philip P. Saginor, Ph.C., F.A.C.A., Professor of Pharmacology, Ohio College of Chiropody, $3.10, 73 pages, 12 illustrations, Press of Western Reserve University, Cleveland, Ohio, 1957.

This excellent reference book contains a review of the narcotics and analgesics from opium and its alkaloids through the current synthetic proprietaries. There is a digest of the current antibiotics included. Under narcotics chapter, there are the various do's and don'ts, regulations and most important there are typical prescriptions outlined, tolerance, etc., and toxicology.

Descriptions are thorough and comprehensive. Under narcotics, for example, the commercial or proprietary narcotic preparations are described and help the practitioner to become familiar with the various names and synonyms. Example: Demerol—Meperidine or Isonipecaine, (Winthrop Stearns), Demerol possesses three main properties, a. Analgesic, b. Antispasmodic, c. Sedative.

This is only a sample, full descriptions cover the Empirins, etc., and practically all the necessary sedatives analgesics of common use in our practice. How the Harrison Narcotic Law affects us is covered thoroughly. The law is described in easily understood language. Cautions and precautions—the very latest regulations are included, also the uses and abuses.

Under antibiotics, not only are cautions and precautions emphasized, but some very good illustrations are used in describing the sources and manufacture. Forms available in antibiotics are given, the manufacturer, etc. Blood levels are covered. Comparative charts are also used where Penicillin-G and Penicillin-V are concerned. I was impressed with page 38, the family tree of Broad Spectrum Antibiotics, an excellent and informative page.

The Tetracyclines are covered rather well. There is a valuable chapter for collateral knowledge, even if some of the items are not within our practice, but most of the important antibiotics are covered.

The charts which are interspersed not only are descriptive, but will familiarize the reader with the different manufacturers, especially if the pharmaceutical representative does not call on you regularly.

Prescription writing, which appears to me to be a weak spot in our practice, is covered very nicely in this publication, as is the arithmetic involved in this important phase of science. If for no other reason, this book should be obtained by every new practitioner. Dosage and incompatibilities are given prominence. Weights and measures are covered, as are the various vehicles and containers. Alligation is described and explanation of its usage is given. Some excellent formulae are included. Description of prescription containers are given.

This book is very well done with excellent illustrations and descriptions. This is an excellent addition to your library in practice.

Harry L. Hoffman, Ph.G., D.S.C.
Washington, D. C.

"A chip on the shoulders is too heavy a piece of baggage to carry through life."
—John Hancock (1737-1793)

DIGESTS FROM THE LITERATURE

Anyone wishing to read the complete article, if not available in your local library, may borrow it through interlibrary loan. A microfilm may be borrowed from the National Medical Library, Washington 25, D. C., or a photo-duplication may be obtained from that library at a cost of fifty cents for five consecutive pages.

ANESTHESIA: ANALGESIA

Systemic Toxic Reactions to Local Anesthesia, D. C. Moore and J. Green. California Med. 85: 70-74, 1956.

A true anaphylactic-like reaction, occasionally causing death, can follow local anesthesia. This reaction is generally due to a high blood level of the anesthetic drug. The severity of the reaction depends on the rate at which the anesthetic agent is absorbed, as well as on the organs first supplied by blood ladened with the drug. With local infiltration or nerve block to an extremity, absorption of the agent is slow because the blood supply is smaller. Topical application of a local anesthetic to the mucous membranes of the respiratory tract is much more apt to allow the blood level of the drug to reach the heart and brain. In many instances of serious reaction (even death), following use of Pontocaine, the concentration and volume may have been excessive for the individual. When Pontocaine is used in the respiratory tract, 4 to 5 cc. of a 2% solution (80-100 mg.) would be an excessive dose; 40 mg. (2 cc. of a 2% solution) is usually safe in this area. Signs and symptoms of a severe systemic toxic reaction are faintness, a sensation of blacking out, incoherent speech followed by unconsciousness and apnea, the twitching of fingers and generalized convulsions. All physicians using local anesthetic drugs should have an orderly planned routine of treatment of possible reactions. Methods of treatment are described: administration of oxygen by bag and mask, use of an endotracheal tube if necessary, and artificial respiration if apnea occurs, use of intravenous fluids—5% dextrose in distilled water, or 15 to 25 mg. ephedrine sulfate, and repeated if necessary, or intravenous drip of Neosynephrine 10 mg. added to 1,000 cc. of a 5% glucose in distilled water. Uncontrolled convulsions are treated with Pentothal (0.6% drip or 2.5% solution).

CIRCULATORY SYSTEM

Chronic Ulcerations of the Lower Extremities: Differential Diagnosis and Treatment, J. A. Costello and J. O. Costello. J. Amer. Osteopath. Assn. 55: 732-35, 1956.

Chronic ulcerations of vascular origin in the lower extremities occur in the following frequency: ulcerations of venous insufficiency, ulcerations of arterial insufficiency, and ulcerations resulting from a combination of both. Those from venous insufficiency are either varicose ulcers resulting from varicose veins or postphlebitic ulcers following iliofemoral thrombophlebitis (milk leg). These two types are discussed as to development and treatment. In the postphlebitic ulcer permanent damage has occurred to the saphenous and femoral venous systems which drain the extremity; venous return is through collateral veins. The collateral veins are adequate after operative procedures that eliminate varicose veins and interrupt the retrograde column of venous blood occurring in the recanalized femoral vein. Elastic support is required until the collateral venous return reaches maximum efficiency. Ulcerations due to chronic venous stasis are associated with arteriosclerosis obliterans, diabetic arteriosclerosis obliterans, thromboangiitis

obliterans (Buerger's disease), endarteritis obliterans, and hypertensive ulceration. Many of these patients have intermittent cramps of the leg muscles after exercise and, besides pain at the site of the lesion, have pain radiating through a toe or part of the foot along terminal nerve fibers and occurring invariably at night; it is relieved by standing erect. Treatment is directed to increasing the articular circulation. The extremities should never be elevated. Alcohol and tobacco should not be used. Bland ointments and mild boric acid solutions bring some comfort. Application of heat is dangerous. Deproteinated pancreatic and other tissue extracts are helpful. Local antibiotics are irritating. If vasodilating drugs prove ineffective, lumbar synpathectomy should be performed. If ischemic ulcers develop with associated chronic arterial occlusion, enhancement of venous drainage and improvement of arterial circulation are required.

Peripheral Circulatory Disturbances; Treatment by Massage of Connective Tissue in Reflex Zones, M. Ebner. Brit. J. Phys. Med. 19: 176-80, 1956.

Connective tissue participates in the regulation of acid-base equilibrium, the water content of the body, its salt content and osmotic pressure regulation. The mobility of the muscles and other structural parts depends upon the consistency of the connective tissue elements, the amount and type of fiber forming the intercellular substance, and the fluid content of the tissue. A type of massage is described which was experimentally carried out, and brought promising results in patients with vasomotor disturbances; further study is suggested. The technique consists of stroking by the ring and middle fingers of the right or left hand, depending upon which side is affected. The movement produced by the skin on the underlying tissue causes a tensile strain on the subcutaneous and interstitial connective tissue, which in turn causes a nervous stimulation that influences the circulation of the segment being treated. The treatment of peripheral disturbance in the arm or leg is always given on the back from which the segmental nerve roots originate. The results are of a reflex nature. The skin begins to redden and may raise a weal. When tension is released in the back it may spring into the anterior distribution of the segment; this is counteracted by compensatory or release strokes. Muscular massage and ultra-short-waves are contraindicated because they affect the deeper, larger vessels; the capillary field does not function normally and cannot accommodate the increased blood flow of the deeper vessels; therefore pain may be increased.

Peripheral Circulation, B. Folkow. Ann. Rev. Physiol. 18: 159-194, 1956.

A complete review of the subject published between June 1954 and June 1955 is presented, so far as the literature was available, in Gothenburg, Sweden. Even this is extensive since it includes 477 references. These papers are concerned with physiological aspects of the circulatory system, excluding those bearing on the heart and pharmaceutical and therapeutic studies. The topics discussed are apparatus and methods (pressure and pulse wave measurements and blood flow measurements); arterial blood pressure and pulse wave; biophysical aspects of the structure of the blood vessels; hemodynamics; capillary circulation and exchange; arteriovenous anastomoses; venous vessels; nervous control; receptors of importance for vasomotor control; humoral factors; regional systemic blood flow (cerebral, coronary, kidney circulation, splanchnic and liver circulation, circulation in adrenal glands, in skeletal muscles and skin, and uterine and fetal circulation); pulmonary circulation (blood pressure in pulmonary circulation distensibility of pulmonary vessels, pulmonary capillaries and adjacent small vessels, nervous control of pulmonary vessels, influence of breathing, work and bleeding, patho-

physiology) ; aspects of general cardiovascular adjustments; hypothermia; hemorrhage and shock; hypertension.

The Reflex Nervous Control of Human Skeletal Muscle Blood Vessels, I. C. Roddie and J. T. Shepherd. Clin. Sci. 15: 435-40, 1956.

Change in body posture, even raising the legs, causes reflex changes in forearm blood flow, as demonstrated in 12 healthy male subjects. Raising both the legs and the lower trunk produces greater increase in forearm blood flow than raising the legs only. The increase in flow was less in a cool room than in a warmer one. The effect of blocking the radial, median and ulnar nerves gave evidence that increasing the flow is mediated through a nervous reflex. Since the blood flow to the forearm is mostly to the muscle, and that to the hand is mostly to the skin, the increased blood flow apparently occurs in the muscle and not in the skin. When indirect heating is used, affecting only cutaneous vessels, blood flow to the forearm is not increased by change of posture. The conclusions are that the efferent pathway of the vasodilator reflex is functionally independent of the fibers which affect cutaneous vessels when change of body temperature occurs.

Massive Insulin Hypoglycemia and Capillary Vascular Physiology in Man, J. W. L. Doust and M. E. Salna. Diabetes 5: 284-88, 1956.

Two non-diabetic patients given massive doses of insulin, five times a week for three months, were studied to determine any changes occurring in capillary musculature. These patients were followed through a series of hypoglycemic episodes caused by injections of insulin; acral blood flow in the arterioles, capillary blood flow, capillary bood pressure, capillary blood-oxygen, were determined throughout a 3-month pre-insulin observation period, and through the hypoglycemic episodes until consciousness was regained, and five hours after insulin interruption, when the patients had entirely recovered from hypoglycemia. Corpuscular flow rates decreased progressively as hypoglycemic coma developed and was paralleled by changes in skin temperature and suggested a similar influence on arteriolated blood flow. With onset of coma an increase in tissue volume occurred, suggesting a waterlogging of the tissues, and was accompanied by a small but significant fall in capillary blood-oxygen saturation, increase in capillary blood pressure, decrease of plasma protein, and elevation in hematocrit and in hemoglobin content.

DERMATOLOGY, ALLERGY AND FUNGUS DISEASES

Deficient Water-Binding in Pathological Horny Layers, P. Flesch and E. C. J. Esoda. Nature 178: 211-12, 1956.

The water-soluble components of the horny layer, rather than keratinization processes, are important in the pathogenesis of scaling skin conditions. They contribute to the normal skin surface's pliability and their amounts are reduced in psoriatic scales and skin. The water-uptake at 100 per cent relative humidity and amino-nitrogen content of normal horny layer (callus) , and of scales from 6 patients with psoriasis and 2 with ichthyosiform erythroderma, were determined. Callus took up approximately 50 per cent more water than the pathologic specimens. The free amino acids are the most important dialysable water-binding components of the horny layer. Diminution of free amino-nitrogen in pathologic scales is limited to the water-soluble portion of the scales. The amino-nitrogen content of the residue was about the same in normal and pathologic specimens. The cause of decrease in amino acids may be abnormal protein metabolism in the differentiating epidermal cells. The high -HS content of psoriatic scales may also result from abnormal metabolism in the non-keratizing portion of the cells, since these groups can be extracted with water or detergents.

Cholinergic Innervation of the Digital Arteriovenous Anastomoses of Human Skin; A Histochemical Localization of Cholinesterase, H. J. Hurley, Jr. and H. Mascon. J. Applied Physiol. 9: 82-84, 1956.

A study was made of the digital arteriovenous anastomoses of human skin in order to determine nerve supply. Specimens of volar pads of the great toes of five healthy subjects were stained by the Koelle method to determine the presence of cholinesterase (ChE). Specific ChE was found concentrated around the arteriovenous anastomoses (AVA) and about the secretory tubules of the eccrine sweat glands. It was not present about other cutaneous vessels and sweat gland ducts, and only insignificant concentrations of nonspecific ChE. This seems to indicate that the cutaneous AVA, and no other vessels, have an adrenergic and cholinergic innervation, and control constriction and dilation.

Use of Cortisone in Lichen Planus, P. B. Mumford and J. K. Morgan. Brit. J. Dermat. 68: 258-60, 1956.

A group of 20 patients with disseminated lichen planus, producing much irritation for a period of 2 weeks to 10 months, were treated, 10 with cortisone given orally and 10 with placebos. The dosage was 150 mg. (6 tablets) daily for 2 weeks and then 75 mg. (3 tablets) daily for 2 weeks more in divided doses three times a day. Treatment was discontinued within 2 weeks in two patients, one because he had recovered and the other because he grew much worse. Of the 10 receiving cortisone the results were good in 6, fair in 4; of those receiving placebos results were good in 1, fair in 2, poor in 7. Of 2 patients receiving the dummy tablets, 1 became erythodermatous in 2 weeks and the other developed lichen planus pemphigoides in 4 weeks. Half of the first group relapsed within a month; repetition of treatment gave 50 per cent clearance. Since lichen planus is a self limiting disease and benign, it is questionable whether treating with a measure presenting so many hazards is justified. However, because of great irritation in some cases, use of cortisone in selected cases may tide the patient over a distressing phase.

Use of Tranquilizers in Diseases of the Skin, A Preliminary Report, P. LeVan and E. T. Wright. California Med. 85: 87-88, 1956.

Chlorpromazine and reserpine were used in treatment of 274 patients with various types of inflammatory dermatitis; approximately 60 per cent were benefited. But often side effects were so severe the drugs had to be discontinued. Results were inconsistent and unpredictable when a reserpine tranquilizer was given to a group of 52 hospitalized patients. Meprobomate (Miltown or Equanil) given to 164 patients with skin disorders, administered in similar manner to that of the first group produced a tranquilizing effect with minimal side reactions. Agitation developed in only one patient. Meprobromate seems the drug of choice where tranquilization is desired, but further study of the drug is necessary.

MEDICAL PRACTICE; GROUP PRACTICE

Guiding Principles of Medical Examinations in Industry, (Editorial). Indust. Med. & Surg. 25: 443-46, 1956.

The objectives of industrial medical examinations are (1) to measure medical fitness of individuals to perform their duties without hazard to themselves and to others; (2) to assist individuals in maintenance or improvement of their health; (3) to detect the effects of harmful working conditions and advise corrective measures; (4) to establish a record of the condition of the individual at the time of each examination. The examination is conducted by the physician himself, aided by adequately trained assistants. It is his duty to interpret medical findings and to make decisions regarding their work significance. The ex-

amination must be suited to the industry, its various jobs, physical demands and health hazards. The minimal examination is discussed and the manner of conducting it, together with a discussion of periodic and special examinations, particularly on transfer to a different job. The ratings are based on fitness for work for a specific job, or physical fitness for any job, determination of limitating defects for certain jobs correctible or incorrectible, and finding of defects requiring medical attention which seem handicapping or disqualifying. Rejection from no-hazard jobs should be on grounds of communicable disease, incapacitating injury or disease, or mental illness which impairs judgment or prevents cooperative effort.

MUSCULOSKELETAL SYSTEM

Studies in the Mechanics of Synovial Joints. V. The Statics of Single Joints, A. MacConaill. Irish J. M. Sc. s.6, No. 368: 353-64, 1956.

The magnitude and directions of the forces stabilizing a single joint were investigated in relation to the theorem that the articular force is equal to the load thus stabilized. The results showed that the "resultant of the muscular force acts at the center of gravity and is inclined to the stabilized part at an angle which is half of the deviation of the part from the pendent position," and further, that "the muscular component of the transarticular force is quantitatively related to the work done against gravity by the total musculature, this relationship being linear; and that the muscles concerned—the 'shunt muscles'—act as ergometric and goniometric gauges of the nervous system." Among the subjects discussed in this mathematical study are: action of muscle on bone, and of gravity on bone; the fundamental muscular theorem; accurate definition and range of magnitude of the muscular vector; conditions for minimal muscular force; rotor vectors; intracapsular transference of force; actual use of muscles for stabilization, and the partition of muscular activity.

Making Plastic Arch Supports, A. A. Kirk and H. M. Kunkle. Clin. Orthoped. 7: 232-36, 1956.

Details of constructing this support with Johnson and Johnson plaster to fit the individual foot are given, together with its finishing inside and out after drying. A glass cloth is used which is the same as that used in covering boats, the number of layers of the cloth needed depending upon the patient's weight. The disadvantages are that hardness of the material requires use of power tools for scraping and sanding; the front edge unless carefully rounded will cut into the shoe and cut the sock; the glass cloth tends to kick up around the heel unless held down until firmly stuck; a larger shoe is required; bony prominences may become sore unless the rubbing areas are sanded; the shoe may slap during walking; the plastic must be used before its gets too old. The advantages are its individual fit, it can be reinforced at any time and pressure readjusted and it can be remolded if sufficiently heated. Good results from its use are reported in 90 per cent of 30 to 40 supports made. Poor results were due to soreness from rubbed bony prominences, or to use in patients with indefinite diagnoses.

Differential Diagnosis of Old and New Trauma of Bone, A. H. Witthohn. J. Amer. Osteopath. Assn. 55: 767-68, 1956.

Differential diagnosis of old and new bone injuries requires knowledge of the various possibilities, good radiographs, and a clear clinical history of the mechanism of of the trauma and of previous traumas, and an examination of the part. The traumas considered are fractures, degenerative spurs, periarticular articulations, pathologic fractures, fatigue fractures, epiphyseal displacement; also, delayed sequelae of bone trauma such as osteoporosis, acute bone atrophy, and traumatic arthritis.

Subcutaneous Tear of the Tendon of the Peroneus Longus: Its Relation to the Giant Peroneal Tubercle, M. Burman. Arch. Surg. 73: 216-19, 1956.

A man aged 38 had a tear of the peroneus longus tendon which extended between the two bony joints of the tubercle and the cuboid. Sudden inversion of the foot and repeated inversions caused the tendon to be stretched over the pully of the giant peroneal tubercle. The man had occasional sharp pains on the outer side of his heel in the inframalleolar swelling since the age of three. He walked on the outer side of the foot with his heel off the ground. The knee on that side had a valgus deformity of 10 degrees, the leg seemed displaced laterally on the thigh, and the patella moved with a grating sound laterally in flexion and medially in extension. At operation the peroneal tendon was reduced to size, the torn part of the tendon resected, and the proximal stump of the tendon passed through a slit in the peroneus brevis tendon and joined to it; the distal stump was fastened to the cuboid. Two months later the patient returned to work. He wore an inner bar brace with an outer strap and was able to walk well.

NERVOUS SYSTEM

Repeated Pressure Mononeuritis, Report of a Case, J. P. Fitzgibbon. Bull. Los Angeles Neurol. Soc. 21: 102-03, 1956.

The case of a 24-year old painter is reported, who had compression neuritis occurring in six different positions, including that of standing on a ladder. Symptoms of weakness in the left hand and later in the right hand also were noted after long periods of sitting in a chair, watching television, with his wife sitting on his lap. This caused numbness and deep pain in the left thigh which required him to walk around until normal sensation returned. Two years earlier he had developed temporary right foot-drop, which never recurred. At the age of 16 he had a left radial palsy with wrist-drop which lasted from 3 to 4 days but this did not recur. On several occasions he had awakened from sleep with a numbness of the right arm. Numbness and deep pain in the left thigh after standing on a ladder required that he walk around to revive sensation. His symptoms were those of pressure or stretch neuritis involving both ulnar nerves, the left radial nerve, the right peroneal nerve, the right brachial plexus, and the left lateral cutaneous nerve of the thigh. He evidently had less resistance than the average individual to prolonged pressure or stretch on his nerves.

NEW GROWTHS

Melanoma-Simulating Nodules Due to Capillary Aneurysms, E. Epstein, F. G. Novy, et al. California Med. 85: 22-25, 1956.

Six cases of dark nodules which gradually or suddenly enlarged are reported; three near the eye, one on the base of the left ring-finger, one on the forehead, one on the cheek. Such lesions are usually benign, including blue nevus, junction nevus, pigmented basal-cell epithelioma, melanotic freckle, epithelial and sebaceous cysts, granuloma pyogenicum, glomus tumor, hemangioma, hemorrhages, fibroangioma, angiosarcoma and capillary aneurysms. Wanton sacrifice of tissues is not warranted. Growth, bleeding, and deepening of color may occur without ulceration. Malignant degeneration must be ruled out. It is important to differentiate these lesions from melanomas and premelanomatous junction nevi by conservative excisional biopsy. Radical surgery is required if the lesion is a melanoma.

PHYSICAL MEDICINE, REHABILITATION

Rehabilitation of the Hemiplegic Out-Patient, H. Droller and G. Thornely. Brit. J. Phys. Med. 19: 135-39, 1956.

In planning a program for rehabilitation of a hemiplegic, it is necessary first to deter-

mine how much functional ability remains and to carefully appraise the remaining "useful assets." It is necessary to assess the residual defects and the ability of the patient to adjust to them and to adopt a rational attitude toward these disabilities. The purpose of a rehabilitation program is to prevent deformities and contractures; to retrain in walking; retraining in use of one or both limbs as far as possible; training to work with the limb on the other side; eradication of speech defects; building up power of concentration and constructive thought processes and development of self confidence. Occupational therapy must be changed in type frequently or the patient will be bored, unless the exercises are to improve walking. The hemiplegic has to be constantly encouraged, taken to the clinic occasionally for supervision, and overhauled in the hospital annually. Time and effort are repaid by having the patient leading an independent life rather than being bedridden.

Manipulative Therapy for the Aging, M. C. Beal. J. Amer. Osteopath. Assn. 55: 674-77, 1956.

The purpose of manipulative therapy is restoring normalcy in functioning of muscles and joints. Chronic postural changes and osteopathic lesions are common in the aged, particularly those with arthritic symptoms. Patients with injuries should have x-ray examination before manipulation is begun. Tests of motion, especially of joint mobility are important in examination of the extremities. As long as a patient does not exceed his functional range of motion he has no difficulties. If his range is exceeded, or is decreased by injury or disease, symptoms of joint dysfunction arise. The amount of functional mobility required by the patient must be determined. Comfort may be attained in postural disabilities, accompanied by low-back pain and fatigue, by use of stretching techniques, mild corrective exercises, or use of supports. Treatment may be curative, palliative, or just for maintenance, that is, keeping the patient comfortable and preventing further disturbance. During manipulative therapy both patient and physician must be relaxed; cooperation of the patient should be obtained by making him comfortable; movements should be slow, combining force with skilled application; excessive force should never be applied against active resistance of the patient. Treatment should be aimed at restoring the aged patient's functional mobility rather than complete range of normal joint motion; rejuvenation is not possible. Treatment should be designed to provide maximal relief with minimal distress, particularly in the aged. Three types of manipulative technique are described: (1) corrective technique to restore joint mobility and normalize pathologic changes in the adjoining soft tissues; (2) articulatory technique to carry a joint passively through its range of motion; (3) soft tissue technique to effect relaxation of muscles and ligaments. The length of treatment depends upon the individual case; treatments should not be given oftener than two per week.

RHEUMATOLOGY; ARTHRITIS

Prednisolone-Buffered Salicylates in the Treatment of Non-articular Rheumatism, H. H. Tillis. J. Med. Soc. New Jersey 53: 177-80, 1956.

Prednisolone-buffered salicylate therapy was used in 80 patients with non-articular rheumatism; more than one-third had bursitis, some had fibromyositis and tenosynovitis, and in others inflammation was caused by physical strain, surgical trauma, or some unknown agent. Prednisolone was given orally, 15 mg. the first day, then reduced by 2 to 5 mg. each day to a daily dose of 5 mg. for as long as needed—1 week to 1 month. At the same time 10 gr. every

4 hours of buffered salicylate were given. Results were excellent in 75 per cent, fair in 5 per cent, and poor in 20 per cent. Relief came in 1 to 2 days or not at all. In all but 2 of the 30 with bursitis excellent results were obtained. In the 16 failures the complaint was psychogenic in some; in others failure was due to some sudden tearing or shearing injury to the connective tissue.

Intra-Articular Steroids: Clinical Applications and Laboratory Effects, I. F. Duff. Postgrad. Med. 19: 577-83, 1956.

The effect of more than 1,000 injections of hydrocortisone into 105 joints of 60 selected patients with rheumatoid arthritis was a definite increase in relative viscosity of joint fluid, associated usually with a distinct decrease in the total number of nucleated cells, mostly due to a decrease in the number of polymorphonuclear cells. These changes indicate a favorable alteration in the characteristics of synovial hyaluronic acid. Hydrocortisone acetate was injected into the joints at least three times at intervals of 3 to 4 days. In the 105 joints treated no clinical response was achieved in 19 per cent. Clinical improvement in about 31 per cent was not maintained and the injections were discontinued. In 50 per cent of the joints (in 27 of the 60 patients) sustained benefit was obtained by serial injections of this steroid, in some instances combined with orthopedic and physical medicine procedures to reduce flexion contraction of the knees. In 16 patients observed for many months benefit was sustained for 15 to 57 days by the injections. In 7 patients it was possible to discontinue injection because of remission of the disease. However, intra-articular hydrocortisone therapy in rheumatoid arthritis is suppressive, not curative.

A rigid aseptic technique must be maintained when soft tissues or joint cavities are entered by a needle. Injection into tissues is relatively ineffective; failure is often due to not making sure the needle is in the synovial cavity. Doses exceeding 30 to 50 mg. have no advantage. The tertiary-butyl hydrocortisone acetate preparation seems the most effective. In addition to involvement of the upper extremity, pain and limitations associated with osteoarthritis, particularly of the knee, are benefited by this treatment. This is not true of the hip, as putting a needle into the hip is difficult. Steroid therapy is an addition, not a substitute, for other treatments, such as use of salicylates, physical therapy for increasing muscle strength, and measures to relieve flexion contractures; adequate rest, maintenance of joint function, and attention to the patient's general health.

Evaluation of Combined Prednisolone-Aspirin Therapy in the Treatment of Arthritis, M. M. Szucs, V. Holonko, et al. Ohio State Med. J. 52: 722-23, 1956.

A series of 400 patients with various types of arthritis treated with a cordex combination containing 300 mg. aspirin and 0.5 mg. prednisolone per tablet, were considered improved with minimal side effects, such as slight gastrointestinal upsets, which responded to amphoteric colloid therapy. The treatment may not be of value in serious cases, but in mild to moderate cases of arthritis in which large doses of ACTH or cortisone are not desirable, it may be helpful. A newer prednisolone-aspirin combination, with triple the amount of prednisolone, per tablet, recently brought considerable improvement in 100 trial cases, and side effects were minimal.

Pilot Study of Intra-Articular Procaine and Hydrocortisone Acetate in Rheumatoid Arthritis, G. R. Fearnley, R. Lackner, et al. Ann. Rheum. Dis. 15: 134-39, 1956.

The effect of hydrocortisone acetate and of procaine was studied in 10 patients with involvement of one knee joint, each receiving four fortnightly (2-week period) injections into the joint of one drug, then 8

weeks' rest (followed by four fortnightly injections of the other drug, followed again by 8 weeks' rest). Five received hydrocortisone first and 5 received procaine first. Assessments were made at 2-week intervals. The dosage was 2.0 ml. (100 mg.) hydrocortisone and 4.0 ml. 2% procaine. An increase in range was shown during the first course of injections, whether hydrocortisone or procaine. Changes occurring during the first treatment showed significant improvement over those during the second treatment, whichever drug was used. Those receiving hydrocortisone relapsed during the rest period, levelled off somewhat during procaine injections, and relapsed again during the second rest period, while those receiving procaine first maintained improvement during the entire trial. Hydrocortisone acetate showed a slight but not significant advantage over procaine. The objective of the study was not evaluation of substances used, but exploration of the possibilities of a cross-over design.

Active Immobilization of Joints in Rheumatoid Arthritis, M. Kelly. New Zealand Med. J. 55: 11-14, 1956.

Immobilization of rheumatic joints for a few weeks does not produce ankylosis, as is generally feared, so long as the joint cartilage is intact. Immobilization increases the range by suppressing the pathologic process. It is useless to try to increase the range of movement of stiff elbows and shoulders. Unless the joint is painful, ordinary movements will regain whatever range is possible. Passive movements are not helpful; they only make the joint more painful and further reduce the range of movements. In acute stages of inflammation continuous fixation causes the periarticular swelling and synovial thickening to subside and the synovial fluid soon disappears. Three factors causing stiffness are painful movements, spasticity of muscles, and thickening of the capsule. Immobilization of an acutely arthritic knee in a cylindrical plaster cast or band caliper allows the patient to walk. Correction of a flexion deformity is done under general anesthesia. The knee is straightened and the caliper fixed on; swelling of the knee should not delay correction of the deformity. Prolonged rest in bed can be disastrous to muscles, bones and joints.

MISCELLANEOUS

The Structural and Functional Dimensions of a Human Existence. I. Hallowell. Quart. Rev. Biol. 31: 88-101, 1956.

The recent literature is reviewed in regard to the various definitions of man and the difficulty found in coordinating his structural and functional dimensions in preparation of a unified evolutionary picture. Most of the emphasis has been on the functional criteria. "Culture" as a unique possession of man among the primates is variously considered. The belief that speech is a generic human "trait" has been questioned along with erect posture, large brain, smaller canines and other characteristics, is being questioned, since the first hominids were small-brained and neither men nor culture suddenly sprang into existence. A human level of existence must be defined not only in structural terms, but according to behavioral levels of adaptation as seen in living primates, which are as legitimate a basis for reconstructing behavioral evolution as are the deductions from comparative anatomy. The author proposes use of the term "procultural stage" which recognizes behavioral linkage between the Hominidae and other primates. At this stage are found in rudimentary and unintegrated forms many of the conditions indispensable for development of culture at the human level: learned behavior, bi-parental families, structured social groups, some form of communication, and tool using. 61 references.

QUESTIONNAIRE ON FOOT SURGERY

1. Are you interested in doing surgery? Yes..... No.....

2. Scope of surgery being done. Bone....., Soft Tissue.....

3. Hospital....., Office.....

   A. If hospital, give type. Medical....., Osteopathic.....,
   Chiropodical .....

   B. Office—Do you have a separate room for surgery? Yes..... No.....
   What equipment: Autoclave....., Operating Table.....,
   Complete instrumentation....., Oxygen Equipment.....,
   Nurse R.N....., Other.....

4. Are you a Fellow..... or Associate..... of A.C.F.S.

5. Have you ever taken Post Graduate work in surgery? Yes..... No.....
   If so, where taken ....
   How many hours? .....

6. How many cases per year on a three year average do you operate?
   .....
   Bone Surgery, Bunionectomies....., Joint Resections..... .....,
   Condylectomies....., Amputations....., Joint Repairs.... .....
   Soft Tissue, Nails....., Cysts....., Ganglions.....,
   Tenotomies....., Neuromas....., Verruca (With Sutures) .....,
   Other ....

7. If suitable courses in surgery provided in your area, would you be interested in obtaining such training? Yes..... No.....

Lester A. Walsh, D.S.C., F.A.C.F.S.

Please return completed questionnaire to:
Dr. Lester A. Walsh, 709 N. Colorado Ave., Midland, Texas.

ORGANIZATION NEWS

Secretaries of local, state, regional, affiliated, subsidiary and other related organizations are invited to submit copy for these columns.

MASSACHUSETTS

The Massachusetts Chiropody Association held its annual meeting on October 5th and the following officers were elected: President, Sidney M. Heller, D.S.C., Milford, Mass.; President-Elect, Carlman I. Fisher, D.S.C., Salem, Mass.; First Vice President, Maxwell P. Zide, D.S.C., Fitchburg, Mass.; Second Vice President, Albert B. Reiss, Pod.D., Boston, Mass.; and Executive Secretary, Sidney G. Holmes, D.S.C., Boston, Mass.

MISSOURI

The Missouri Association of Chiropodists held its 42nd annual meeting in Kansas City on October 11, 12 and 13. Speakers on the program were as follows: L. R. McCain, D.S.C., Chicago, Ill., "Modern Foot Surgery"; Charles S. DeZanek, D.S.C., Chicago, Ill., "Orthopedic Management of Postural Foot Conditions"; G. A. Shipe, D.S.C., Fort Dodge, Kansas, "Manipulation of the Foot and Ankle"; C. M. Poser, M.D., University of Kansas Medical Center, "Neurological Examination of the Lower Extremities."

The Kansas Association of Chiropodists met with the Missouri Association. This was the largest convention that the Missouri Association has ever held. More publicity through newspapers, television and radio was secured than has ever been obtained for chiropody in Missouri at the time of any convention.

The following officers were elected, President-Elect, Frank Fulkerson, D.S.C., Chillicothe; Vice President, O. L. Lippard,

"LIFE'S FOUNDATION — YOUR BABY'S FEET" is an outstanding and comprehensive booklet on the growth and care of children's feet. Written for the layman, it is concise, cleverly illustrated and will prove valuable especially to the parents of young children. Many Chiropodists have received a copy of this booklet and have ordered them in quantity. For those of you who have not ordered and for those who wish to reorder, please clip the order blank below and mail with your check for your supply.

WOMEN'S AUXILIARY
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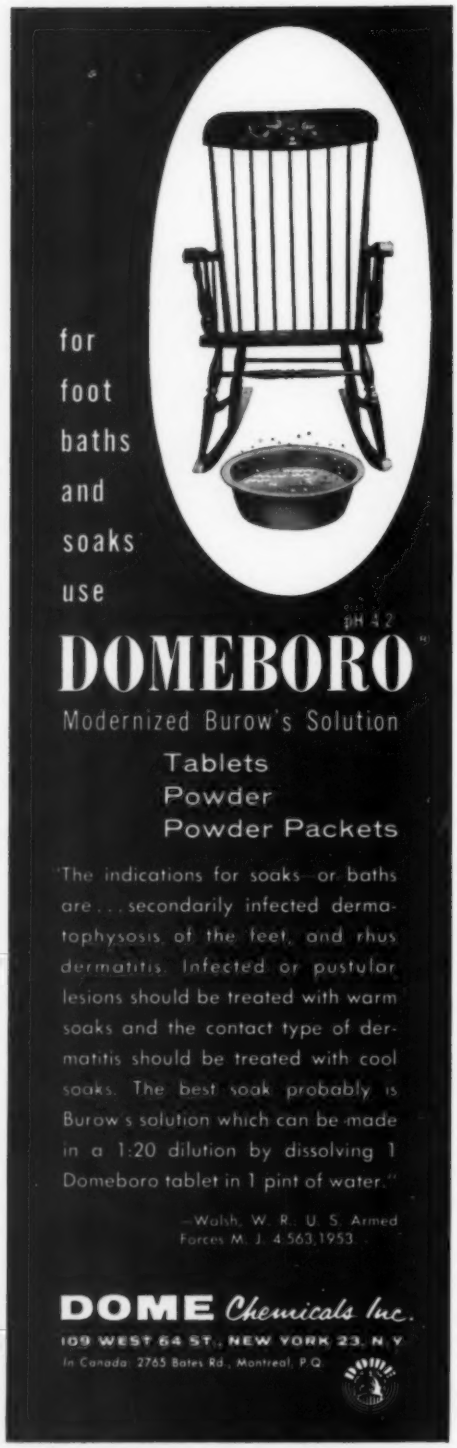
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—Walsh, W. R., U. S. Armed Forces M. J. 4:563,1953
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D.S.C., St. Louis; Executive Secretary, C. B. Footlick, D.S.C., Kansas City; Treasurer, Glen Woofter, D.S.C., St. Louis; Delegate, L. A. Hansen, D.S.C., Kansas City; Alternate, Kenneth Lane, D.S.C., St. Louis; Editor of the *Missouri Bulletin*, Robert F. Triplett, D.S.C., Nevada. Florence M. Peters, D.S.C., of Kansas City, took over the Presidency. E. M. Hindes, D.S.C., St. Louis, is the retiring President.

St. Louis was chosen as the next convention city.

PENNSYLVANIA

Berks County Division

The first annual banquet of the Berks County Division of the Chiropody Society of Pennsylvania, was held at the Berkshire Hotel, Reading, Pa., on October 12. Dr. Emil Bartos served as toastmaster and introduced the new officers. The speaker of the evening was Dr. Charles E. Krausz of Philadelphia.

Philadelphia Chiropody Society

The monthly scientific meeting of the Philadelphia Chiropody Society was held on Tuesday, October 15, at the Philadelphia County Medical Society Building. An "Evening of Science" included the following guest speakers: Louis Newman, D.S.C., "Nerve Block and Local Anesthesia"; Louis Zulli, D.S.C., "Ankle Edema Analysis"; Morris Moss, D.S.C., "Office Diagnostic Procedures," and Alan Pasternack, D.S.C., "Self-Molding Crest Pad."

RECEIVES CERTIFICATE OF ACHIEVEMENT

Dr. Michael Romano, son of Mrs. Michael Romano, Sr., 30 King Phillip Ave., Barrington, Rhode Island, was presented a Certificate of Achievement by the Commanding General, Letterman Army Hospital, San Francisco, California, upon completion of his tour of duty.

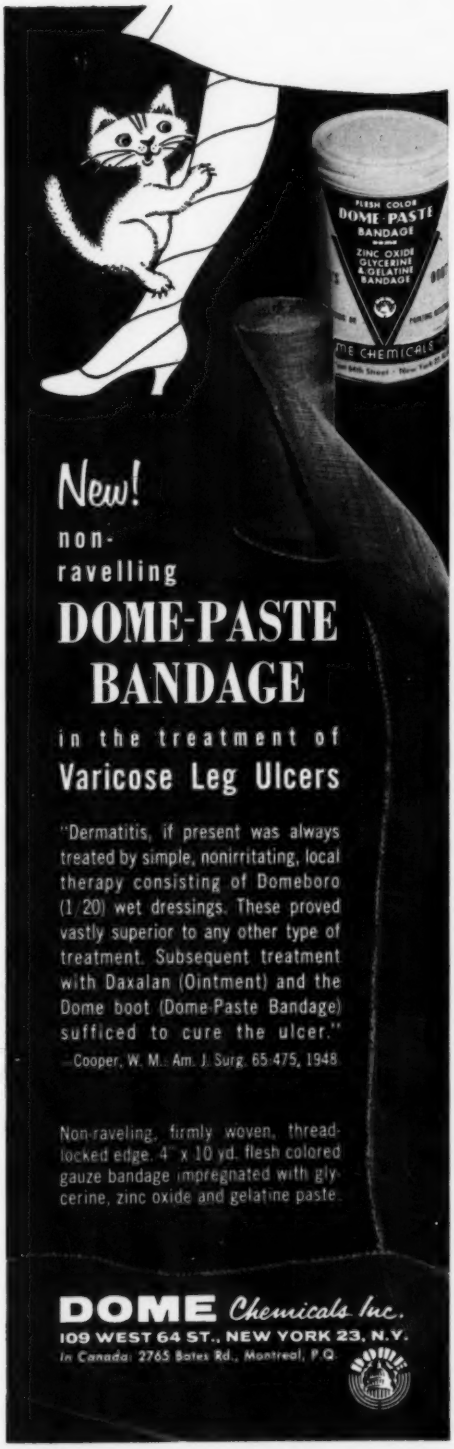
Since reporting to duty at Letterman in October, 1956, Dr. Romano has been chief of the Chiropody Clinic as well as having done research in the field of foot surgery.

The Certificate reads in part, "In providing all professional care for the Chiropody Clinic of the Orthopedic Service, you displayed a superior order of professional skill, outstanding doctor-patient relationship and unusual devotion to duty. With no clerical assistance during the greater part of your assignment, you rendered care and maintained clinical records on an average of 370 patients per month, requiring many hours of overtime in order to maintain this extremely full appointment schedule. In addition, your investigative efforts into the therapeutic benefits derivable from tenotomy of toe extensor tendons in several foot problems, produced many beneficial results and promises to be a distinct contribution in your specialty. The many commendatory statements of your patients to the staff of this hospital are evidence of your superior performance of duty and reflect the highest credit on yourself, the hospital, and the Army Medical Service."

Dr. Romano graduated from La Salle Academy, Providence, R. I., and completed his pre-med studies at Providence College and graduated from Temple University, Philadelphia, Pa., School of Chiropody in 1954.

Before entering the military in October, 1955, Dr. Romano practiced at the Temple U. Chiropody Clinic and Hospital, Philadelphia General Hospital and the Univ. of Pennsylvania Hospital.

ITS HURT EVER SINCE I WUZ HERE LAST TIME
WOT AN AMAZING CAPACITY TO ENDURE PAIN YOU HAVE MRS. CARPER
HISTORY CARD SHOWS LAST VISIT SIX MONTHS AGO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SOME IMPORTANT FACTS ABOUT THE AMERICAN FOOT HEALTH FOUNDATION

JONAS C. MORRIS, D.S.C., PRESIDENT
Audubon, N. J.

I doubt if anyone can be more aware of the tremendous undertaking of The American Foot Health Foundation than I am. Having served on the Board of Trustees of the Foundation prior to becoming an officer, and now President of the American Podiatry Association, I know the tremendous scope of this organization's operations. The immense volume of work which has gone into surveying every problem of our profession, public relations-wise (and in many other aspects), has been unfortunately known only to the Board of Trustees and in a lesser degree to the House of Delegates.

Under Dr. Sidney Hirschberg, President of the Foundation, researches, studies and surveys have produced a large storehouse of information which, when all of it is put into active use, would afford our profession the finest public relations program which could possibly be conceived for any professional group in this country.

If it were possible for only a small portion of this material to be placed in the hands of the individual podiatrist-chiropodist, the deep purposes of the Foundation and what it is aiming for—and its infinite value to organized podiatry-chiropody—would be better understood than it is at present.

Why, many might ask, has not this information been disseminated throughout the profession? The answer is simple. There has certainly never been any secrecy concerning any phase of the activities of the Foundation. The bare fact of the matter is that the cost of distribution would eat up the limited funds under which the Foundation is now operating.

This cost problem is but one of the many reasons that the AFHF has embarked on

ANNOUNCEMENT

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3. Calcaneal bursitis with calcaneal trimming.
4. Hallux Valgus Surgery—office and hospital techniques.
5. Ingrown nail techniques, local anesthesia techniques.
6. Suturing—in detail.

The speakers will be Fellows of the American College of Foot Surgeons and well qualified in presenting their subjects.

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Other American Podiatry Association Members
Registration fee $35.00

an annual membership drive. The magnitude of the objectives ahead of the AFHF demands that it have the strength, unity, the power and the prestige of every member of the profession back of it. The Foundation needs you and me, and we need the Foundation, even if we consider but this one factor: its projects on a national and community scale for disseminating the facts about foot health and the role of the foot doctor in foot care.

Let us face the inescapable fact that to get this continuing job done, the Foundation cannot for perhaps some time to come, engage outside public relations counsel. Cost in relation to present income is prohibitive. For the present it doesn't need to. AFHF has the ideas and the ways to expand its operations. All it needs is the means in terms of basic operating expenses. This will enable it to arrive at a position to launch properly and thoroughly its over-all program—and at a per capita cost per member which would represent the merest fraction of what such a program would cost if we had to go out and buy it.

Well do I know that you are constantly besieged by solicitations for one cause or another, just as I am, but this happens to be one of the times in which you and I are directly involved in a situation from which we stand to benefit personally. I would like to take this opportunity to issue an appeal, not only to the individual practitioner to support this drive and become a member of the Foundation, but I also appeal to the State Presidents and Secretaries to cooperate in every possible way in the regional phases of this undertaking, as they have been advised by letter from the Foundation.

As the nominal annual individual membership entitles you to receive a copy of the Annual Report of the AFHF for 1957, you will find this 24 page study and projection of programs ahead to be rewarding reading.

The AFHF has been and is doing its work. Now it is our turn to "pitch in."

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* Lyons, Meadows, and Fuchs. A New Method for the treatment of Peripheral Vascular Disease. Southern Medical Journal, Volume 48, Nov. 8, Aug. 1955, Pages 811-819.

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COMMUNICATIONS FROM THE PROFESSION

To the Editor:

The case history of W. W. Fine, D.S.C., in the October 1957 Journal of the N.A.C., prompts this report of a similar accident which occurred to one of my patients. While watching television, his leg became numb, and on rising he fell, dislocating his shoulder.

In the October 13th "N. Y. Times, Science Notes," medical authorities mention that prolonged sitting in an awkward position while watching TV may produce serious circulatory disorders of the legs. Similar disorders may occur after driving long distances in an automobile, especially in tall men, who are peculiarly susceptible.

TV viewers should be informed that they get up and move about at least once an hour in addition to moving their legs frequently.

Sidney H. Roth, Pod.D.
New York, N. Y.

To the Editor:

While we are in the process of changing the N.A.C. to the American Podiatry Association, may I suggest we follow the dentist in using a degree resembling as near as possible the M.D. degree and that degree for them is D.M.D. or Doctor of Dental Medicine.

I suggest we use the degree P.M.D., Doctor of Podiatry Medicine.

Nelson C. Singer, D.S.C.
Lexington, Ky.

(Editor's Note: The most common dental degree is D.D.S., Doctor of Dental Surgery. In addition to the P.M.D. suggested by Dr. Singer, the following degrees have also been proposed: D.S.P., Doctor Surgical Podiatry and D.M.P. or M.D.P., Doctor of Medical Podiatry.)

DEATHS REPORTED

Dr. Herbert I. Adler
Brooklyn, N. Y.

Dr. Robert LeRoy Casler
Ft. Lauderdale, Fla.

H. H. Finch
Kalamazoo, Mich.

Dr. Sidney I. Gaft
New York, N. Y.

Dr. Irving J. Hartman
Jackson Heights, N. Y.

Dr. Aubrey Manster
New York, N. Y.

Dr. Jacob Monk
New York, N. Y.

Dr. Charles J. Motto
Cleveland, Ohio

Dr. Louise B. Potter
Kansas City, Mo.
Dr. Potter passed away October 18.

Dr. James Solomon
Poughkeepsie, N. Y.

Dr. Earl M. Stewart
Youngstown, Ohio

Dr. Loney B. Adams
St. Petersburg, Fla.

Dr. Adams passed away on November 8, 1957, after a brief illness. Dr. Adams was a graduate of Illinois College of Chiropody and Foot Surgery and was one of the charter members of the Chiropody Association of Florida. He served as its secretary-treasurer for 33 years, was an honorary member of the national and state associations and had been a member of the State Board of Chiropody Examiners.

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CONVENTION DATES AND MEETING NOTICES

National Association of Chiropodists
Washington, D. C.
August 22-26, 1958
Shoreham Hotel

Region One
(Conn., Maine, Mass., N. H., R. I., Vt.)

Region Two
(New York)
New York, N. Y.
Feb. 21-23, 1958
Barbizon Plaza Hotel

Region Three
(Del., Md., N. J., Pa.)
Atlantic City, N. J.
April 17-20, 1958

Region Four
(Ohio)
Toledo, Ohio
May 17-18, 1958
Commodore Perry Hotel

Region Five
(Ill., Ind., Mich., Wis.)
Chicago, Ill.
March 21, 22, 23, 1958
Morrison Hotel

Region Six
(Colo., Iowa, Kan., Minn., Mo., Nebr., N. Dak., S. Dak.)
Denver, Colorado
April 11-13, 1958
Cosmopolitan Hotel

Region Seven
(Idaho, Mont., Oreg., Wash., Wyo.)

Region Eight
(D. C., N. C., S. C., Va., W. Va.)

Region Nine
(Florida)

Region Ten
(Ala., Ga., Ky., Miss., Tenn.)

Region Eleven
(Ark., La., N. Mex., Okla., Texas)
Dallas, Tex.

North Carolina Chiropody Association
Scientific Conference
Southern Pines, N. C.
Jan. 25, 26, 1958
Hollywood Hotel

Phi Alpha Pi National Fraternity
Philadelphia, Pa.
Feb. 7, 8, 9, 1958
Benjamin Franklin Hotel

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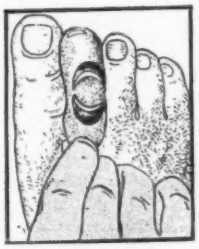

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53 East 124th Street
New York, N. Y.

Ohio College of Chiropody
2057 Cornell Road
Cleveland, Ohio

Temple University, School of Chiropody
1810 Spring Garden Street
Philadelphia, Pa.

MOOD ELEVATORS

Contributions to this column are more than welcome. In fact it depends upon them.

A.O.P.

The only thing that happens to a man who waits is a beard.

It's human to have your mind wander, but you'll get in trouble if you follow it.

A lot of trouble in this world is caused by combining a narrow mind with a wide mouth.

The Texas & Pacific Railway ran an essay contest in its magazine, "Topics," on "The Care of the Teeth." An 8-year-old youngster submitted this:

1. Visit the dentist regularly.
2. Brush your teeth daily.
3. Don't shove at the drinking fountain.

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America is a free country. Here, if you don't like the weather, you can move to another place and not like it there.

Howie Lasseter

These days there are too many people in too many cars in too much of a hurry going in too many directions to nowhere for nothing.

Fireman's Fund Record

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———

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———

Behind every successful man there is a woman who is constantly telling him he is not so hot.

———

When a father loses a daughter he is sometimes compensated by getting a bathroom.

———

Worry is like a rocking chair. It gives you something to do but doesn't get you anywhere.

———

"The future of the race moves forward on the feet of little children."

Phillip Brooks

———

"When your ankles roll in your foot troubles begin."

Lewin

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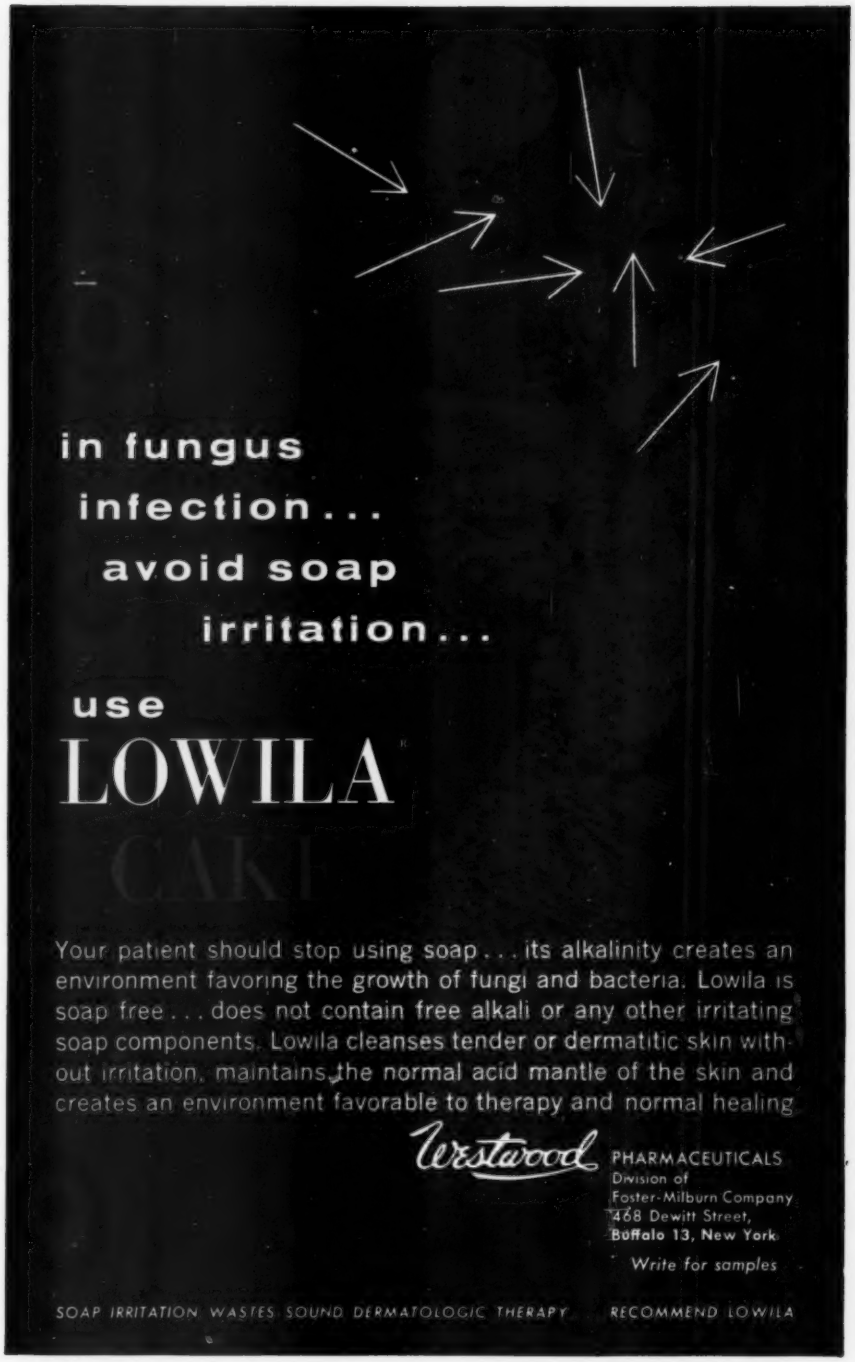
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